Clinical Lecture
ON
DISSEMINATED FOLLICULAR LUPUS
(SIMULATING ACNE).

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IN the early part of the year 1874 my attention was particularly excited by an eruption in a young lady, which at first sight seemed to me to be a severe acne vulgaris, attacking the greater part of the face, but which, on closer examination, was best described as a lupus made up of small nodules seated at and limited to the follicles of the face. I have seen some other *well-marked* instances of the same affection, one of which I will show you to-day, and purpose to offer some observations to you thereon.

I am not aware that any of the multitudinous writers on dermatological subjects have yet noticed the particular clinical condition to which I am now referring. The terms "lupus acnéique," "lupus acnéiforme," and "adénome lupiforme,"[1] which, to the uninitiated, convey the idea of a follicular lupus, are, in reality, synonyms for "lupus erythematodes," and particularly that aspect of it in which comedonous points are observed to freely stud the surface of the general infiltration.[2] This "lupus acnéique" of the French, the old "seborrhœa congestiva," is made up of *patches* of greater or less size, limited to the nose and cheek usually; whereas the disease I am about to describe is composed of *isolated points* or *spots* only, from the size of pin's-heads to less than that of a small split pea, which do not exhibit comedones in their centre, but have the distribution of an acne rash. "Lupus acnéique" would, in reality, not inaptly describe it; but that term, as I have just shown, is preoccupied, and I have therefore employed that of "follicular lupus" (disseminated).

The following are the notes in brief of three typical instances of this follicular lupus.

CASE 1.—Miss D——, aged twenty-eight, consulted me on March 12th, 1874, with supposed acne of the face. She stated that she had suffered from the disease for four years. The patient was threatened with decided phthisis when she was seventeen years old, but with care the disease appeared to be arrested. She has been considered since "to be delicate." Last year she took a bad cold, and has remained weak and "out of health" since. She had not been feeling at all well lately, and had become thinner. Her appetite had been bad; she had been troubled with dyspepsia, which was an old complaint of hers, and some menstrual deficiency. She gets up remarkably tired in the morning, and so forth. On examining her chest, no active mischief was detected in the lungs, but in the apices the breathing was somewhat harsh. The rash from which she now suffers, as stated before, began four years since, and has run an indolent course. It does not vary much, except that when the patient improves in health the rash becomes less red and decided. The eruption is limited to the face, and is made up of separate disseminated dullish red-brown indolent nodules, varying in size from a pin's head to a large millet seed. On careful examination they are seen to be mostly seated at the follicles, and some have a minute yellow point in the centres, as though there were a little pus present; and on account of this, at first sight, such spots look like those of acne, but their base lacks the colour, the softness, and the inflammatory aspect of the base of acne spots, and is instead firm, and apparently indolent, semi-gelatinous-looking, and dullish brown, like small lupus nodules. Many of the spots lack entirely the acne aspect, and are composed solely of the lupoid nodules. The eruption affects the cheeks, the forehead, and the chin, and there are a few about the lower part of the cheek towards the neck. The separate spots seem to remain without change, and would appear inclined to continue so for an indefinite time; and what is very important to note is, no ordinary acne treatment has any effect upon them, and practically they can only be made to disappear by actual destruction by repeated applications of caustic. Exceptionally a spot dies away, but not like an ordinary acne-spot, for it leaves a pit behind. It is not possible to determine the early stage of the rash, as no fresh spots have been observed to occur since the case has been under observation. The only treatment of any use was the application of acid nitrate of mercury to the separate spots.

CASE 2.—Miss ——, aged seventeen, was sent to me by Dr. Smyly, of Dublin, on April 20th, 1877. Her aunt wrote to say that the case was a very peculiar one, and had "baffled the best Dublin doctors." My notes say:—Her father was a very unhealthy man, and very gouty; her mother, a strongly constitutioned and healthy woman, but the subject of much worry. No consumption in the family. The patient is a delicate girl, always chilly, and with bad chilblains, and suffers from much depression of spirits. She has a very bad appetite. She takes no alcohol. She had severe typhoid fever when aged nine years, and has also had measles and whooping-cough, but beyond being "not strong" she has not been attacked by any beyond these illnesses. She suffers from a copious "acneiform" eruption on the face, for which she has long been under treatment without any alleviation. The outbreak began, the mother says, in 1874, on the nose *only*, "which used to become perfectly scarlet at times, worse towards evening; but no spots appeared for a long time, and when they did they were small, clear-looking specks, gradually spreading over the face, and increasing in size." When I first saw the case it looked like an indolent acne rash; but I noticed that the bases of the spots were not made up of inflammatory material, but of tissue exactly resembling a lupus nodule, and it was perfectly clear to me that the disease was a disseminated follicular lupus, the central portions assuming the suppurative character of acne spots. The whole face was affected, but especially the nose. In some cases the spots had shrivelled away, leaving a brownish and minute scar. The case was watched most carefully for some time with the view of ascertaining the life history of a spot, but this could not well be absolutely determined. The spots did not undergo much change, except that they at times varied as regards the degree of the attendant congestion. The smallest spots were not all acneiform in aspect, but were in some instances wholly made up of little points of lupus-like tissue. In others, rather larger, the central portion consisted of a yellowish apex, with or without a comedo body in its centre, surrounded by a collar of the lupus-like tissue. In other cases two or three nodules had run together into an oblong little mass, and then the latter consisted of lupus-like tissue, covered over by minute white, semi-adherent scales. But whether the disease was first acne, and subsequently took on the lupoid aspect, it was difficult to say. It seemed as if there were first a little congestion, then the development of new tissue about the upper part of the follicle, which by invading and irritating the sebaceous glands induced a complicating acne state. No spot was larger than a very small split-pea. The spots which looked most acneiform in their central portions were not comedo-like, but similar to pustular acne. It was the surrounding basal tissue that was so striking and characteristic.

I show you an admirable water-colour drawing of the face of this patient.

Dr. Smyly, writing to me on Feb. 17th, 1878, concurs in my view of the case, and says: "I look upon it as a case of lupoid acne, if there is such a disease. There is a constant tendency to the formation of fresh pustules, which heal with a slight depression if scooped out, but if left alone, become fleshy, and two or three combine into an unhealthy mass. The nose is now free, and is getting pale."

The treatment adopted was the exhibition of cod-liver oil and iron tonics, and the destruction of each separate spot

[1] Thérapeutique des Maladies Vénériennes et des Maladies Cutanées. Par MM. Diday et Doyon. 1876.

[2] M. Lailler, in his "Leçons sur quelques Affections Cutanées (faites à l'Hôpital St. Louis, 1877)," remarks: "*Le lupus acnéique* présente lui aussi des charactères bien tranchés. Il a été décrit sous différents noms par les auteurs; c'est ainsi qu'il est désigné sous la dénomination de *acné sébacée partielle* par Cazenave; *acné atrophique* par Chausit; *acné crétacée, herpès crétacé du bout du nez*, par Devergie; c'est principalement à la face, et surtout aux joues et au nez, qu'on observe le lupus acnéique. Il est charactérisé par les plaques rouges s'étendant progressivement, légèrement saillantes. Sur ces plaques on constate un certain nombre de petits trous, qui ne sont autres que les orifices très-dilatés des glandes sébacées; celles-ci sont plus ou moins distendues par une matière blanchâtre, que l'on peut faire sortir en pressant légèrement; ces glandes ainsi distendues forment au niveau des plaques rouges précédentes des saillies plus ou moins marquées," &c.

with fuming acid nitrate of mercury. The nodules were not at all easy to destroy, and in this respect answered to the properties of lupus tissue. Ordinary acne remedies had no effect upon the disease.

CASE 3 I show you. The patient, Henry J——, came to the hospital Feb. 9th, 1878, and is still under treatment. He is aged twenty-one, and on admission was observed to be suffering from apparently a severe attack of acne vulgaris of the face. The eruption, however, attracted our particular attention from certain peculiarities in its aspect. The following are the main particulars of the case which were noted at the time. His father and mother are both living and healthy; he has three sisters who are living and well and healthy; one brother has "consumption," which was contracted in Russia; he has not lost any brothers or sisters, and there is no history of "lupus" in his family. The patient is a native of Torquay, but has lived in London for ten months, and previously for some time, but an interval of two years intervened; he does not remember having been attacked by any important illness. His occupation is that of a clerk in a warehouse. The spots first appeared in the beginning of August, 1877. At that time several itchy hard pimples with white heads appeared round the mouth, but these disappeared in a few hours. They were shortly followed by a red blush under the left eye, and on this were developed the present spots as the blush faded away. Then certain spots came on the forehead; some were prominent, and others "under the skin." None of these spots ever "came to any head," and, when squeezed, they never yielded anything but blood. He asserts positively that the spots do not go through any regular series of changes after their appearance, and then vanish, but that when once developed, they remain *in statu quo;* none have gone since the first outbreak.

The patient is a rather delicate-looking lad; he is somewhat overgrown. Disseminated over the face are a goodly number of dull, fleshy, coppery-red spots, chiefly located, however, on the eyelids, forehead, and bridge of nose, whilst some are on the cheeks, chin, and lips, where the hairs are commencing to grow. They are about the size of ordinary acne vulgaris spots or larger, and are mostly distinct from one another; but they differ markedly from ordinary acne spots in appearance when closely examined, though they superficially so closely simulate them. A magnifying glass discloses their seat to be follicular; a few have scales on them, and a few have a little yellow head in their centres, and apparently a central plug, but the base is made up of tissue having all the aspect of lupoid tissue, and it seems as if the lupoid tissue had been deposited around the gland in connexion with congestion and irritation, and plugging of the follicles. There are about a dozen comedones on the face and a few on the back; those on the face are chiefly on the chin and whisker region. The spots prick and shoot occasionally; some flushing after food. In a few instances several small spots have run together into an oblong raised little heaped-up-like mass, a few lines broad and high, and a quarter of an inch long. The papules are exceedingly indolent, and have remained in one condition a long time without change, having been unamenable to all the remedies which have been given under the idea that the disease was ordinary acne. There are no spots on any other part of the body.

(To be concluded.)

ON SURGICAL SWINGS AND PULLEYS AS AIDS TO REST AND MOTION.

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THE value of principles in surgery, as in every-day life, depends not merely upon their abstract truth, but upon the manner in which they are applied. Of all surgical principles of treatment, none is more important than REST. Physiologically it is sound, practically safe; but the benefits derivable from it are only partial when its application is not precise and thorough.

Rest is something more than a mere negation of motion. A patient with a broken leg, a punctured or an inflamed knee-joint, cannot, without proper appliances, enjoy rest on the best adapted mattress; because the least irritation and the slightest movement of the body give rise to muscular action, which displaces and further irritates. In these and in many other cases of injury and disease, the question which presents itself to the surgeon's mind is, how to give effect to the therapeutic indication of *perfect rest;* how to construct an apparatus which shall completely restrain motion and be perfectly comfortable—rest being impossible without comfort. In the solution of this problem, the practical surgeon at the bedside learns, as the experimental physiologist does in the laboratory, that precision and thoroughness are essential to success in the use of appliances nicely adapted to give effect to scientific principles.

Valuable as rest is in the treatment of all surgical injuries, it is in the management of fractures that it admits of the clearest, the most conclusive, and the most frequent illustration. Discussing in 1856 the relative merits of the different methods of treating fractures, I made some observations from which I beg leave to make a brief quotation.[1]

"Theoretically considering the principle of action of an immovable apparatus, closely fitting as it does to the elevations and depressions of the limb after the fragments have been brought into accurate apposition, it may be said to act the part of an outer skeleton, whilst the solution of continuity in the bone is being repaired, giving to the soft parts that support which the internal skeleton once afforded. The surgeon applying an apparatus of this kind closely follows nature's example. The soft parts of the animal frame are supported upon two principles—by an outward shell, as in the crab; by an interior skeleton, as in man. When a part of the interior bony framework is broken, what more rational than, during its repair, to support the soft parts by nature's other scheme—an investing shell? This is precisely what the surgeon does in treating a broken leg or thigh with an immovable apparatus. Once applied it effectually prevents displacement of the fragments and its consequent attendants—injury to the soft parts, pain, and deformity."

Sayre's Treatment of Spinal Curvature.—The literal application of the simile sketched in the preceding passages impressed me forcibly, when I first had the advantage of witnessing Professor Sayre apply his plaster-jacket for spinal curvature. When the spinal stem yields, he supports the bending trunk with an investing shell. In his endeavour to secure immobility of the spine, he acts on accepted principles; but, to do him justice, the distinguished American has reconciled ingenious originality with traditional conservatism.

We had been accustomed to think that the spinal column yielding at a softened spot became consolidated in an angular position, as the result of nature's curative effort, which it was desirable, within certain limits, to favour and not to thwart. Sayre teaches us how best to prevent the curvature of the softened spine, and, when it has become bent, to straighten it and keep it so, by suspending the patient and fixing the trunk in a plaster-jacket.

This plan of treatment proves to be an excellent one in very many cases. I was putting it into practice, in consultation with my friend, Dr. Flynn of Brownhills, and with the assistance of my then house-surgeon, Mr. R. B. Wilkins, when a defect in the apparatus was very nearly attended with fatal consequences. The jacket had been almost completed when I noticed the suspended patient looked pale and unconscious, the pulse at the wrist being at the same time barely perceptible. The cord being drawn taut, and not running easily in the compound pulley-blocks, I could only release our patient instantly by lifting her in my arms, while Dr. Flynn unhooked the pulleys from the top of the tripod. With restoratives in the horizontal position animation soon revived, but the experience was impressive, and I have since heard of more than one similar case.

It occurred to me that what was required was a pulley which admitted of a weight being lifted easily, fixed at any height, and rapidly released. I found all these conditions fulfilled by Weston's pulley-block, which is largely manufactured for industrial purposes by Messrs. Tangye, of the Soho Works in this town. Having communicated my idea to our surgical instrument makers, Messrs. Salt and Son,

[1] Researches in Pathological Anatomy and Clinical Surgery. By Sampson Gamgee. p. 155 et seq. London, 1856.

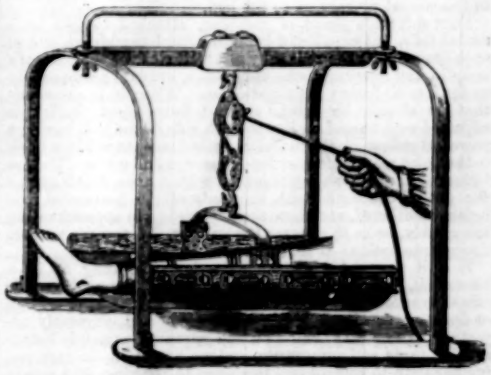
they, with the friendly concurrence of Messrs. Tangye, have adapted the pulleys above mentioned to surgical purposes, and made some ingenious and very useful modifications in the apparatus with which they are employed.

Such is the construction of the modified tripod that when the patient is raised a very slight deflection of the cord to the right or left causes the pulley to become self-retentive; that is to say, the body, whatever its weight, cannot possibly descend, although the force which raised it be suddenly withdrawn. But immediate release is possible at any moment. A pull in a downward direction instantly releases the catch, and allows the patient to descend without jerk. A further improvement in the apparatus is that the whole of the parts are made easily portable, and with the necessary jackets, bandages, plaster, shears, tr[illegible], tin strips, and well padded chin and axilla supports, are contained in a box which can be conveniently carried in a brougham. (See Fig. 1.)

FIG. 1.

Improved Fracture Swing. — Every surgeon knows how much relief can be given by swinging an injured limb; but by the ordinary apparatus little more is done than to raise the limb and reduce engorgement by facilitating the return circulation. In a case of fracture, movements of the limb or body are felt, with all their evil results, at the seat of injury, in accordance with the well-known principle that the resistance of an object is only equal to that of its weakest point. When the limb is slung, if the medium of suspension be, as it should be, very easily movable, it, and not the fracture, becomes the weakest point, and in it accordingly is expended the motive power, the limb remaining at perfect rest. It follows that to ensure the great desideratum—the communication of the least possible impulse to the point of fracture—a swing should be as movable as possible, so as to exhaust in its undulations the motive power communicated to the limb, and thereby render impossible a jerk in any part of its length. This object is very imperfectly attained by the Salter swing in general use; the chain is stiff, and to lengthen or shorten it with the suspending hook involves discomfort and often pain. These evils are all removed by the substitution of a fine rope for the chain, and by using the Tangye pulley-blocks as modified by Messrs. Salt and Son. By means of this appliance, the *modus operandi* of which is clearly illustrated in the drawing (Fig. 2), the fractured limb may be raised or lowered to any desired extent (within the limit of the height of the frame), without the slightest possibility of any jerk or strain, and a very desirable relief afforded to the patient during the sometimes enforced period of inaction. The pulley, being self-supporting, requires

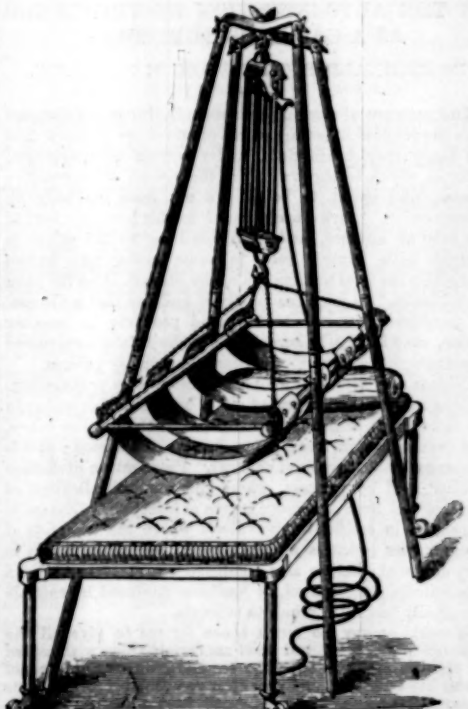
FIG. 2.



no fastening; it cannot become entangled, and admits of an unskilled attendant raising or lowering the limb for the patient's comfort, without the possibility of displacing the injured parts.

Surgical Hammock.—The fracture-swing illustrates the apparent paradox that the possibility of easy motion is necessary for the enjoyment of perfect rest. What is true of a limb is equally true of the whole body. In cases of injury to the spine or pelvis it is very difficult to raise or

FIG. 3.



move the body without displacement or pain and even worse results. On my suggestion, Messrs. Salt and Son have constructed an apparatus (Fig. 3), in which the

pulley-blocks already described play a very important part. In this hammock the heaviest patient can be lifted free of the bed-clothes by *one person*, and retained at perfect ease for any length of time in the suspended position without any effort on his own part or that of the attendant. After any necessary surgical manipulation, the patient can be lowered in the easiest manner on to the bed.

Four soft wide pieces of webbing, attached to two horizontal rods, but capable of being removed therefrom, and of such length that the rods may rest well clear of the patient's body in any movements he may make, are laid permanently under him and next his night-dress. When it is necessary that he should be lifted, a stout four-legged derrick is adjusted with two of its legs on each side of the bed, having a powerful pulley, on the model described, suspended by a hook to the point where the four legs converge and unite. The inferior block of the pulley is armed with a hook which grasps the chains connected with the ends of the horizontal rods before mentioned, and these are hindered from approximating too closely, so as to squeeze the patient, by transverse bars fitting into sockets at their extremities.

It will thus be seen that the body is hung as in a hammock, and by a moderate traction on the cord may be raised to sufficient height to admit of any surgical operation or dressing, or of the bed being rapidly and efficiently adjusted. The pulley, being on the improved principle before alluded to, is self-supporting, and no attention is required further than to control any tendency to swaying, or a rotary motion.

When all is ready, the catch is released, the patient gently lowered, and the frame, pulleys, and subsidiary adjuncts removed, the webbing straps and horizontal rods remaining *in situ* in readiness for future use. For greater convenience, the poles unscrew in their centres, and can be separated by means of thumbscrews from the cruciform connexion which sustains the pulleys.

ON THE AUTO-INFECTION OF THE LUNGS AS A CAUSE OF TUBERCLE.

BY REGINALD E. THOMPSON, M.D., F.R.C.P.

THE presence of morbid products in the lungs at a distance from the original infecting source occurs so as to show that the lungs may appropriate, under certain circumstances, material which is thrown off in the course of destructive disease, and ought to be thrown out from the body by expectoration. Such translation of matter from one part of the lung to another, and from one lung to the other, is fraught with hazard, and, in some cases, may hasten materially the fatal termination of the disease. And the term "translation" is used designedly to indicate that a disease, by transferring its resultant morbid products to another region, may induce lesions of a secondary nature expressed in pathological terms differing from the primary process.

Disease may spread by simple extension or by propagation. Extension may be illustrated by a bronchitis beginning in the large tubes, which may pass down to the smaller tubes, and eventually, in some cases, involve the alveoli; this is extension by continuity of channel. Propagation of disease is illustrated by pyæmia, where there is multiplication of diseased foci from a primary source of infection. Disease is translated in artificial tuberculosis where the injection of septic matter procures a peculiar kind of irritation. It is very doubtful whether this condition ought to be called a tuberculosis, and, indeed, it has been produced in animals admittedly but little prone to tubercle.

It would occupy too much space for me to give all the evidence which has forced upon me certain views with regard to phthisis and tubercle; the examination of one class of cases, day after day, and year after year, makes certain facts apparent, and an opinion is formed by the constant repetition of small points, which, taken separately, might have less force; but in putting forward such an opinion, based upon cumulative evidence, I can relate a few marked instances which point to a conclusion. And, in the first place, I will endeavour to adduce evidence to show that morbid products, the resultants of pulmonary disease, change their position and emigrate to a distant region of the lung, and to the opposite lung. Ample opportunities of observation have been given from the pathological department of the Hospital for Consumption at Brompton, of which I have the supervision.

The plainest evidence on the point is derived from cases in which a fluid of peculiar colour secreted from one lung is found in the opposite lung. Two lungs were examined, of which the left was extensively excavated to within two inches of the lower border by a large trabecular cavity, evidently the result of a low and non-tubercular type of inflammation, freely secreting sanious matter of a dark claret colour. The base was thickened and indurated, and a few minute groups of tubercle were found here. The right lung was found to contain two old contracted and quiescent cavities each as large as a walnut, and the surface above them was puckered and drawn in as usual, with old cavities near the surface. These cavities were found half full of the claret-coloured fluid secreted from the left lung, and besides this there was found, some way below these cavities, a broad band of the same colour (due to the same fluid) running across the lower part of the lung an inch above the lower margin; in the middle of which band were a number of isolated lobular or racemose groups of tubercle, comparatively recent and of unusual colour, for they were slightly stained. Evidently, from the position of this band, which was horizontal and transverse, as regards the erect posture which is always assumed in anatomical descriptions, it could not have happened after death. It must have collected there with the help of inspiration and gravitation, and hastened the fatal termination by clogging the useful portion of the lungs.

Another case may be mentioned which was under observation during life. The physical signs showed that the left lung was firmly and completely adherent and extensively excavated by a large trabecular cavity. There was very little respiration on the left side. Harsh respiration and dull percussion were noted over the right lung. The patient came into the hospital and died about one month after the above examination was made. At the autopsy the left lung was found firmly and universally adherent; extensively excavated by a large non-tubercular cavity, secreting in quantity purple sanious fluid. The lowest portion of this lung, about one-fifth of the whole, was found remarkably sound—I will not say healthy, for it was in a condition of hyperæmia from irritation. Two minute groups of racemose tubercle were found close to the excavated portion; the rest of the lung was quite free from tubercle, the bronchial tubes supplying this portion (which was not active in consequence of the firm adhesions which surrounded it) were transparent and in a healthy condition; the bronchial tubes above being extremely thickened, opaque, and inflamed. The right lung (which had been doing all the work of respiration) was found much enlarged, studded with tubercle, infiltrated throughout with the purple fluid which had found its way from the opposite side and induced ultimate suffocation.

The evidence from cases of pulmonary hæmorrhage bears strongly upon this point. In examining cases of fatal hæmorrhage arising from the rupture of a pulmonary aneurism (which occurs frequently in phthisis, and is without doubt the most common cause of fatal pulmonary hæmorrhage), it is often very difficult, if we look to the evidence afforded by inhalation of blood only, to say in which lung the aneurism will be found—so generally are both lungs stained by patches of inhaled blood. In cases of hæmorrhage into the lungs from aortic aneurism the blood may be found in both lungs. Such a case occurred recently, in which an aortic aneurism was found compressing and nearly occluding the left bronchus. Having examined the man some time before his death, I established the fact that oozing into the left lung was going on. The man died from rupture of the aneurism, and at the autopsy it was found that the whole of the right lung was distended and filled with blood inhaled during the last half-hour of existence. In the left lung hæmorrhage of older date was found, forming a coloured band at the apex and a horizontal band at the base, with a few patches in the middle of the front axillary border of the lung.

In cases where matter is transferred from one lung to the other the influences which compel the matter to assume any region are evidently two—the force of gravity and the force of inspiration. Gravitation compels a preference for the

most dependent parts, the position of which of course varies with the attitude generally assumed by the patient during the day and during the night. Inspiration compels a preference for the apex, the base, and the region of the chest where there is greatest action of the ribs—viz., the front axillary border under the fifth and third ribs.

The next point to which I will refer is the irritation which appears to result from the translation of morbid matter. The simplest evidence of this is to be found in cases where an eruption of tubercle immediately surrounds a cavity. In such instances small grey tubercle is found closely studded round the floor of secreting cavities, diminishing in quantity and closeness of position in direct proportion to the distance from the cavity. This condition has been observed and noted by others. Rindfleisch remarks: "In the immediate neighbourhood of a large cavity occupying the apex of one lung we very often find an enormous number of nodules of uniform and literally miliary dimensions embedded in a parenchyma otherwise but little altered. Should the section be a happy one, we further notice that the nodules are not scattered irregularly through the tissue, but according to a certain definite order—e.g., in branching lines, or in lines radiating from a central point where the nodules are thickly set." He shows a little hesitation in affirming this to be ordinary tubercle, but he concludes the consideration of the matter in these words: "We may regard this as a mere local modification of the ordinary development of tubercles." And, indeed, there seems to be no reason to prevent such a conclusion; it is apparently a secondary irritation of lymphatics.

But there is another peculiar form of tubercle which appears to invade the lung under certain conditions of irritation. I mean that grouped or racemose form of tubercle which affects isolated lobules, and which, from resemblance to a cluster of grapes, are sometimes known by the name of Carswell's grapes. This kind of tubercle is found in peculiar positions, and, if I may be allowed the expression, in peculiar soil—namely, in a highly irritated condition of lung. This irritation does not appear to me to be the result of tubercle, as some suppose. It is not due to the effect of tubercle, because it occurs without the presence of tubercle, and out of all proportion to the tubercle which may be present. I believe it to be a preliminary stage of irritation, which may be developed, by chronicity of irritation, into tubercle under some conditions at present not clearly made out. As this irritation (which is an alveolar catarrh or catarrhal pneumonia) affects lobules, we are allowed to surmise that the irritating matter has been inhaled, and this surmise is strengthened by some experiments on animals, in which catarrhal pneumonia resulted from the inhalation of irritating air. It is in the midst of a region thus irritated that these solitary lobular groups of tubercle are found. They are found sometimes outlying in a dependent portion of lung, extensive ulceration of the lung, or they may be found in the neighbourhood of a cavity of which the supplying bronchial tube as it passes upwards towards the root of the lung gives off a little branch from its under surface, but above the cavity, and this branch is found to lead to the infected lobule. The matter which has infected this may have passed upwards from the cavity, to be drawn downwards into the lobule by another inspiration.

Some attention to the preferential regions in which this form of tubercle is found leads me to the conclusion that the matter which thus irritates is influenced by gravity and by inspiration: by gravity because it is found generally at the most dependent parts—viz., below the level of the root of the lung, and also at the posterior parts; and by inspiration because, in cases where the greatest power of inspiration is called into play in consequence of the extent of disease, this form of tubercle is found just where the lung has the greatest play, and close under the pleura.

A remarkable instance evidencing the effect of gravitation came under notice a little time ago. Two lungs were examined, of which the left lung was excavated by non-tubercular ulceration. The right lung was sound in the sense that there was no ulceration in it, but it was in a highly irritated condition from apex to base. Scattered through the lung in numbers were found racemose groups of tubercle, but almost entirely below the level of the root, and assuming a general grouping round the main descending bronchus. On a first section of the lung it seemed as if no tubercle at all occupied the upper lobe above the level of the root, but a more careful inspection showed one or two groups at the back, close to the main bronchus.

But is there any evidence to show that the matter passes down the air tract? I believe there is. First, there is the fact that the tube supplying the lobule is inflamed, and often opaque; sometimes this irritation is confined to the small tube, but at least it has appeared evident that the bronchial tubes supplying the affected tract are much more inflamed than those which lead to a simply irritated portion of lung. Secondly, there is the evidence that if there is pressure on the bronchial tubes, or adhesions preventing inspiration, those parts affected are not invaded by these groups of tubercle, or are proportionately affected to the amount of inspiration permitted. In evidence of this I will adduce two cases: one which I have already described, where the lower portion of one lung, which was prevented from action by adhesions to the thorax and the diaphragm, was only affected with a few minute groups of tubercle in the near vicinity of a large cavity, the lowest part being quite free, the supplying bronchial tubes being found quite transparent; the other case being one in which the deposit of tubercle was apparently prevented by the presence of a large quantity of fluid between the base of the lung and the diaphragm, which compressed the base of the lung, all the upper portion being infected.

The opinion that I hold with respect to the nature of tubercle is that it is the result of irritation set up in the lungs or elsewhere by the presence of morbid matter, and I have endeavoured to show by pathological evidence that such matter, the result of destructive disease of the lung, may pass down the bronchial tract under the influence of inhalation and gravitation, and set up an irritation that may result in a certain form of tubercle. It must not be supposed that I imagine that all tubercle is formed exactly in the same manner. Although I believe that it is a secondary product, pathological evidence appears to point to the conclusion that there is more than one channel through which irritative matter may be carried to distant parts, resulting also in, but in different forms of, tubercle.

ILLUSTRATIONS OF ANTISEPTIC TREATMENT IN MINOR SURGERY.

BY J. C. OGILVIE WILL, M.D.,
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THE following cases, though apparently somewhat trivial in themselves, are not unimportant illustrations of some points connected with antiseptic surgery, and may, I think, prove of interest to those already engaged in its practice, or who may be—as I myself was for long—on the border-land of belief regarding the soundness of the doctrine on which it was based: a position from which I was ultimately driven by what I saw and heard during a long course of visits to Professor Lister's wards in the Edinburgh Royal Infirmary.

The first case I propose bringing forward should, in some degree at least, convince those who are in doubt that there is a marked difference between the antiseptic treatment of the past and the present; that the true antiseptic method does not depend upon the direct effects of carbolic acid upon the tissues, but upon its germicide properties; that if mischief from without, in the shape of the germs of putrefaction, be prevented from gaining access, the healing process will proceed without the assistance of stimulating applications; and, in short, that the *vis medicatrix naturæ* is all-potent if the wounded tissues are protected from external baneful influences. For in this case the carbolic acid contained in the deep dressings must of necessity have been dissipated long before they were changed, and the rapid progress of the healing process was due alone to the means taken to prevent the ingress of putrefactive germs. It also disproves the correctness of the oft-repeated statement advanced by the disbelievers in the germ theory of putrefaction in wounds, that (to make use of a quotation from Billroth) "scrupulous cleanliness and very careful draining away of all the discharges from the wound are by far the most important factors in the success";[1] for here there was no attempt at

[1] Billroth's Surgery, New Sydenham Society's edition, vol. i., p. 142.

drainage, and the wounded part was bathed in its own secretion for many days, during which the patient was perfectly comfortable, and had but a very slight rise of temperature. What the result would have been had the wound been dressed on other principles, and the dressings left untouched until the eighth day, I leave it to those who may have adopted such a proceeding to say; but I venture to hazard the opinion that he who has once tried such an experiment will be somewhat chary of repeating it. This introduction to a case of minor surgery may appear somewhat out of place, but my aim is the illustration of a principle, a firm hold of which may lead to the advancement of antiseptic surgery, and thus to a diminished mortality in surgical cases of all degrees of magnitude, to a saving of pain to the patient and trouble to the surgeon, caused by needless dressings and unnecessary manipulation of the parts operated upon.

S. F——, aged twenty, was admitted into Anna's ward on June 13th, 1877, suffering from a severe injury to her right hand, the result of a crush between two pinions at a flax-spinning mill. The thumb was completely smashed, the phalanges being broken into innumerable pieces, and the skin and other soft tissues much lacerated, the metacarpal bone was also broken, the hand much torn and bruised, and the soft tissues forming the ball of the thumb completely disorganised. After consultation, it was determined that an attempt to save the hand should be made; so the metacarpal bone was dissected from the remaining soft parts and disarticulated. After operation, the open wounded surface measured about three inches and a half in length by two inches in breadth. One vessel was secured by catgut ligature, the parts were thoroughly washed with a 1 to 20 carbolic solution, and dressed under spray; the usual dressings were applied, several folds of gauze being placed over the protective, this constituting the deep dressing, while the external consisted of eight folds of gauze with a piece of macintosh between the two external layers.—June 14th: External dressing removed; considerably stained with sanguinolent discharge; deep dressing left untouched; patient not suffering from pain. Temperature 99·2°.—15th: External dressing again removed; very slightly stained with serous discharge; patient quite comfortable. Temperature 100°.—17th: External dressing changed; free from stain; deep dressing quite sweet. Temperature 100·2° (the highest point registered during the course of treatment).—20th: Deep dressing removed; the whole surface is covered with small pointed granulations, which bled readily on the application of a 1 to 40 carbolic solution. The hollow left by the removal of the metacarpal bone has been almost entirely filled up, being almost on a level with the surrounding skin, while cicatrisation to some extent has taken place round the edges of the wound. Protective coated with serous discharge; no trace of putrefactive odour perceptible.—On June 26th the wound was found to be considerably diminished in size, and on July 5th only a comparatively small superficial granulating sore remained, the hand presenting a not unseemly appearance.

In connexion with this case, I may refer to another recently under treatment in my wards. The patient got his hand so crushed that amputation in the forearm seemed almost inevitable. The middle, ring, and little fingers were almost completely detached at their metacarpo-phalangeal articulations, while the palmar and dorsal aspects were denuded of skin to a great extent, and the deeper structures torn and destroyed. Dr. Traill, who was then house-surgeon, at my request (for I was unable at the time to visit the hospital), removed the fingers, but made no attempt to form proper flaps. The surface was then thoroughly purified, and dressed antiseptically. For seven days the result was somewhat doubtful, and on one occasion Mr. Brown, the dresser of the case, thought that he perceived a slight putrefactive odour, but on my visit next day the dressings were found to be quite sweet and free from smell; and, after a somewhat prolonged stay in hospital, the patient was dismissed with a useful hand.

The following case, though a failure so far as treatment was concerned, may be cited in proof of the absorbability of catgut.

A man aged seventy-four, suffering from hydrocele of the tunica vaginalis, for the relief of which he had been tapped on five previous occasions, was admitted into Jacob's ward in January, 1877. I was desirous to employ radical treatment, as the patient stated that the intervals between the tappings were becoming shorter and shorter; but on account of his advanced age and infirmity I dreaded the use of any means which would give rise to much irritation or disturbance. I therefore at once put aside the idea of treatment by injections, or by the iodine seton recommended by Mr. Furneaux Jordan (which latter I had used in two recent cases with excellent results so far as permanency of cure was concerned, but which was only obtained at the cost of considerable pain to the patients). I accordingly determined to employ a catgut drain, feeling satisfied that, if I succeeded in carrying out antiseptic treatment properly, I could ensure the absence of undue irritation, and that a cure might then be safely achieved. The hydrocele was tapped on Jan. 12th under spray, and a probe armed with nine threads of thick catgut was passed into the cavity of the tunica vaginalis near the lower part of the scrotum, and brought out close to the external abdominal ring. The projecting ends of the drain were then tied together; the perineum was well stuffed with loose gauze; the external gauze and waterproof dressings were kept in position by drawing the penis through a hole cut in the dressing, over which a gauze bandage was applied, an elastic webbing one, passing round the thighs and abdomen, being employed to keep all in accurate position. As there was no inflammation, no rise of temperature, and no pain excepting on one occasion from over-tightness of the bandage, and only a drop or two of serous discharge from the points of emergence of the drain, the daily progress was uninteresting. The external portions of catgut separated on Jan. 22nd, and in a day or two the pin's-head granulating points left after the detachment of the gut healed, soon after which the patient was dismissed. I saw him again in the course of a fortnight, when no reaccumulation of fluid was apparent. But a month later a certain degree of fulness was perceptible; and when he next came under my notice, about four months after the operation, the sac seemed more distended than in January. The swelling was perfectly translucent at *all* points, and therefore there was no evidence of the presence of the seton; and when he was tapped eight ounces of clear, light-amber-coloured fluid were drawn off. A careful and prolonged examination of the scrotum after tapping failed to elicit any sign of thickening, the parts presenting the usual flaccid feeling observed in cases of the kind. Here, as is evident, treatment failed to prove curative. The object aimed at was to allow the fluid to drain off as it was secreted, in the hope that the upset balance between secretion and absorption might thus be restored. The idea was not original, for I had seen Professor Lister employ it during a visit to his wards in the previous October, when he mentioned the success obtained by Volkmann, of Halle, in the treatment of hydroceles by incision and drainage practised antiseptically.

My friend and colleague, Dr. Garden, to whom I mentioned this case, brought under my notice a paper by Professor Trendelenburg, of Rostock, in a recent number of a German medical journal.[2] The case he relates is a most interesting one of bilocular abdominal hydrocele (Von Kocher), which resisted treatment by drainage, the fluid speedily reaccumulating, but in which a successful result was obtained by incision, the use of drainage-tubes, and the adoption of antiseptic treatment. He states that as Volkmann has already established the safety and certainty of treating hydroceles by antiseptic incisions, and has shown that a speedy cure is ensured without fever or suppuration, he considers it unnecessary to enter upon cases of common hydrocele lately treated in the Rostock clinique. From this and from Professor Volkmann's paper[3] it appears that the treatment of hydroceles by drainage has already acquired a certain degree of favour; but though a cure can doubtless be effected by drainage, I would only recommend its adoption in very exceptional cases, for treatment by iodine injection is so successful an operation that other procedures can be but seldom called for, though I am not prepared to allow that it is either so free from risk, even when properly performed, as some would lead us to imagine, or that "the pain which ensues is generally slight and transient," as Mr. Syme stated it to be.

Though I failed in effecting a cure in the case just noted, I succeeded in two others, one of them an enormous hydrocele of the cord, the other double vaginal hydrocele. The means adopted were similar to that used in the above case. The fluid was first drawn off under spray by means of a trocar, and a probe armed with catgut was passed through the cannula, brought out above, and antiseptic dressings

[2] Berliner Klinische Wochenschrift, Jan 8th, 1877.
[3] Ibid., Jan. 17th, 1876.

applied. In both cases considerable swelling of the tissue took place, but the pain was not nearly so severe as after injection; there was no purulent discharge, the free ends of the drain separated in ten days, and all traces of inflammatory thickening rapidly disappeared. The inflammatory process was not sufficient in degree to give rise to actual pain, or to an appreciable rise of temperature; but it was evidently to this slight amount of inflammation that the cure was due, for hardly any fluid drained away, so that the correctness of the theory on which the mode of treatment was based was disproved by the clinical results observed. I would therefore regard the cases now under consideration as examples of treatment by a catgut seton, and not as specimens of catgut drainage, a subject to which I shall presently refer. In the first case failure was evidently owing to the entire absence of inflammation; in it we have evidence that absorption of the catgut had occurred, and in the others we have no reason to doubt that the same process has taken place; and when we bear in mind that it was not a single thread of the material that was employed, but bundles containing nine threads—two being employed in the double hydrocele, and inserted simultaneously,—the readiness with which absorption took place seems somewhat remarkable, while the slightness of the inflammation in the hydrocele of the cord is striking; for, as Mr. Curling says, "incision and seton are not free from risk, being liable to excite diffuse inflammation of the connective tissue of the part," in illustration of which he mentions a case where "such severe inflammation of the connective tissue succeeded the introduction of a single thread of silk through an encysted hydrocele of the spermatic cord of a boy, that suppuration took place in the iliac fossa, and for a time endangered the patient's life, though he ultimately recovered."[4]

(To be concluded.)

NOTE ON THE ACTION OF QUININE.

BY W. H. T. POWER, B.A., M.R.C.S., L.R.C.P.

THE extreme importance of ascertaining the precise action of *one* drug, on any morbid state, induces me to publish the following remarks.

1. Having had large experience of the action of quina in malarious diseases, I have for some seven years pondered over the matter, not being satisfied with the explanation of its *modus operandi* as given in the ordinary text-books. In the story of the epidemic in Mauritius of 1866–67, written by (then) Surgeon-Major J. Small and myself, we pointed out that the *relapses* of the fever, during our first winter at home and subsequently, invariably occurred after a *sudden* fall of the atmospheric temperature (the "wet and dry bulb" and "maximum" and "minimum" thermometers, being read twice daily); a fall not necessarily to freezing point, but such a fall as, even in summer, would produce a sense of being chilly.

2. Dr. E. L. FOX, in THE LANCET of July 29th, 1876 (p. 154), gave a case of sunstroke, in which, after the subcutaneous injection of quina, the patient recovered. I ventured to suggest to him its mode of action, which he added to a note of his in THE LANCET of Sept. 28th, 1876 (p. 444). And in the ordinary treatment of sunstroke the cold douche is used, which would act on the nerves of the cutaneous bloodvessels, which I also, below, give as the action of quina.

3. I believe the post-mortem signs of death from sunstroke are the same as those from malarial fever—viz., congestion of the venous system, and the blood of the body may be said to be found in the pulpy spleen and in the smaller veins.

4. Malarial poison, as is well known, may take some time before showing its existence in the body. This is well shown in the case of a sergeant, who remained in the centre of the malarial district for some months after the regiment left Mauritius, and had his first attack of ague (much to his disgust) while rounding the Cape of Good Hope, when, he told me, the weather became suddenly very chilly. He was a very intelligent, well-educated man, and, besides, brought with him a medical certificate from a surgeon-major, who was a passenger on board the same vessel. (Such a case furnishes a warning as to certain hill sanataria being malarious, the real fact being the colder temperature may bring out the fever signs, the disease having been really acquired, though not shown, either by residence in, or by merely passing through, a malarious district.)

5. In the *Practitioner* (vol. from July to December, 1872) is a summary of a paper by Dr. C. Boisz, where it is stated quina acts on the vaso-motor nerves and spleen in health.

6. Quina acts apparently, as a drug, just as the heat of the fire does when the burnt finger is put close to it (the old-fashioned remedy for a small burn, to stop the pain), and as Skey's plan of painting a strong solution of nitrate of silver over a burnt surface, to relieve pain. I believe I am right that in both these cases the palsy of the vaso-motor nerves is overcome, the circulation restored, and the pressure of the stagnant blood in the swollen veins on the nerves removed.

7. That any agent, such as heat, causing such palsy, might possibly be overcome by using large doses of quina (in the case of heat I do not know how large). I refer to those numerous cases of death in all classes which often occur from the terrible heat in the Red Sea; persons already with a weakened action of these nerves from malaria are exposed to a fresh cause of venous blood congestion—viz., atmospheric heat,—and suffer accordingly.

8. Of course it would *not* follow that after the palsied nerves had lost almost all control over their organs, quina would have this action, nor in the cases of the enlarged spleen, liver, &c., where hypertrophy of their framework has occurred.

9. As a general point, I may refer to the fact that it is most dangerous in the early morning, when it is coldest, and when (as I found in Mauritius) the bodily temperature in health is lowest in the twenty-four hours; and, again, this action of cold coincides with the effect produced by sudden cold in causing relapses of "ague" in temperate climates, in those who have been exposed abroad in hot climates to the influence of malaria.

10. Supposing this to be a correct explanation of the action of quina, might it not be a fair deductive *guess* that in sufficiently large doses it would be of use in *all* cases of fevers &c. of any description where the tendency to death is by congestion of the right side of the heart, the lungs, or the general venous circulation, especially in the smaller vessels.

11. Of course, if the disease were so far advanced that the stomach was, to all intents and purposes, a lifeless bag, as in the stage of collapse in cholera, quina would be useless, unless, indeed, it might be taken into the system by subcutaneous injection. The action of the cold douche in sunstroke would be on the nerves of the cutaneous circulation, this being an *external* agent, while quina would have the same effect as an *internal* agent.

The worst cases of malarial poisoning I have seen occurred at night, at which time heatstroke is also very fatal. Cases which I have ventured to call "malarial collapse"—i. e., cases in which men have had either mild attacks of ague or no attacks at all, and have been free from fever for some days, go to bed sensible, and a few hours after are found to be apparently asleep, but really not conscious. In these cases (after I had lost one patient, to my astonishment and disgust) I used to administer a twenty-grain dose of quina, and repeated it again in an hour if the pulse got slower, and I lost no more such cases.

I am aware how incomplete this paper is, but I am desirous of bringing the subject forward, since in the last volume of "Materia Medica" that I have seen quina is called an "antiperiodic," which, in the first place, does not tell us anything of its action, and in the second place it acts just as well in cases where there are no "periods," and in these cases, where the malarial poison acts more like a lightning-stroke, giving the system, as it were, no power to establish a reaction—i. e., to develop a stage of preternatural heat—cases I have called *malarial collapse*.

I can only venture to hope that whatever mistakes of reasoning may occur in this paper, these very errors may lead some one more capable to define the real action of this drug, an action so utterly unlike any other, that only those who have seen cold collapsed human beings almost snatched from death's very door by one large dose of it are able to appreciate it.

[4] Curling on Diseases of the Testis, third edition, p. 182.

CASES OF DISEASE OF THE TESTIS.

BY SAMUEL OSBORN, F.R.C.S.

CASE 1. *Epididymitis, due to the pressure of truss.*—S. P——, aged nine, had been supplied with a left inguinal truss on Oct. 23rd. The day following he complained of pain, and on the 25th noticed that the left side of the scrotum was swollen. The new truss was consequently discontinued on account of the pain, and the old one reapplied. When brought to me on Oct. 26th he was in great pain, and could walk only with difficulty; the testicle was not swollen, but there was much thickening and tenderness of the left epididymis. No history of any injury. A left inguinal hernia was present, from which he had suffered one year and three months, and had worn a truss for the last twelve. After douching of left side of scrotum with cold water twice daily, with rest, the swelling went down the same evening very considerably, and on Oct. 28th it had entirely disappeared. A truss with a less strong spring being supplied, no further inconvenience resulted.

CASE 2.—T. G——, aged five and a half, first noticed a rupture on the right side fourteen days previously, and on Dec. 19th was supplied with a right inguinal truss. Two days after epididymitis occurred on the right side; the truss had been worn night and day since its first application. After cold water applications, and discontinuing of truss for three days, pain and swelling of cord entirely disappeared. The original truss, which fitted well, was reapplied, and, being worn only during the day, no further trouble occurred.

Remarks.—The above cases are interesting in the cause of the epididymitis being other than that of gonorrhœa, and in its being a cause not mentioned in works on surgery.

CASE 3. *Gonorrhœa, Epididymitis, and Hydrocele.*—T. F——, aged eighteen, contracted gonorrhœa, which was accompanied by marked chordee, the penis being arched, with the concavity to the left side. Epididymitis and acute orchitis of the left testicle followed, the discharge abating when the testicle became affected. There was also effusion into the tunica vaginalis. After treatment by saline purgatives, with rest and warm fomentations, the effusion disappeared at the same time as the inflammation of the epididymis subsided.

Remarks.—The presence of the chordee on the same side as the subsequent epididymitis was indicative of the inflammation being principally situated on the left side, and of the epididymitis being due to a transmission of inflammation by continuity. That the right and left organs are attacked with equal frequency is probably correct, for the reason that the extension of inflammation along either side of the urethra may reach the opening of one vas deferens prior to the other, and the corresponding epididymis becomes affected by continuity of inflammation. It is probable that the reason why only one testis becomes affected at one time is that the congestion caused by the inflammation occludes the adjacent opening of the vas deferens on the other side. As to the question of puncturing the testicle, no object would have been gained by this operation; and the absorption of the hydrocelic fluid without tapping on the subsidence of the inflammation would not have justified it as an adjunct to tapping. When hydrocele is secondary to another disease, the treatment of the hydrocele must and ought to be subsidiary to the treatment of the original complaint.

CASE 4. *Misplaced Testis.* (Under the care of Mr. Wagstaffe at St. Thomas's Hospital.)—J. P——, aged five months, suffering from misplaced testis of the right side. The left testicle was normally situated in the scrotum, the right was present below the scrotum, bulging in the perineum, and covered with ordinary integument. The right half of the scrotum was empty and contracted. The cord on the right side could be easily traced from the right inguinal ring to the testis in the perineum, the cord lying to the outer side of the scrotum. The testicle could be passed upwards to the groin, returning, however, when pressure was removed; but it could not be passed into its normal position, some constricting band bounding the margin of attachment of the scrotum, similar to the septum which separates the two testes, preventing it. No history of injury, and child born naturally.

Remarks.—There is another form of this malformation, in which the misplaced testis present in the perineum is covered with its usual corrugated integument, this depending upon whether the testicle is beneath one or both layers of the superficial perineal fascia. In the above case the testicle was situated between the two layers of the superficial fascia, the attachment of the deep layer to the ramus of the pubes preventing the testicle assuming its proper position; the septum of the scrotum being formed from the deep layer of the superficial fascia, of which also the dartos is a continuation. The presence of the testicle in the perineum may possibly be occasioned by absence of the gubernaculum testis, or to some irregularity in the origin or insertion, more especially of its middle process, whereby the testicle is diverted from its natural course. With regard to treatment, I would suggest a horseshoe truss fitted to the crutch, and keeping the testicle upwards as much as possible, with the hope of ultimately closing the lower portion of the sac.

CASE 5. *Undescended Testicle.*—C. B——, aged fifteen. No notice was taken of the right testicle not being in its place until seven years ago, when, after a fall upon a fender, a painful swelling was found in the right groin. After a few days' rest the pain disappeared, and the swelling subsided. Six weeks ago, when at school, he fell when wrestling with another boy, his elbow striking him in the right groin. The testicle again became swollen, subsiding slightly after two days, but not perfectly; and when brought to me on August 27th the testicle was then a little larger than a bantam's egg, and very painful. An ice-bag was applied for three days, after which the testicle was the same size as the other.

The testicle is situated in the inguinal canal, in which it can be moved backwards and forwards; but at the lower opening into the scrotum it is apparently stopped by the constricted ring, and prevented from descending therein. The corresponding side of the scrotum is contracted from the absence of the testicle in its proper place. For the last seven years he has, after walking for the space of two hours, been subject to the testicle becoming swollen. On Sept. 5th he was ordered three grains of iodide of potassium three times a day, which after being taken for a month produced a diminution in size of both testicles, and manipulation was then tried to get the right testis into its proper place; but the constriction before spoken of impeded any such purpose, and the testicle still remains in the inguinal canal.

Remarks.—The presence of an undescended testicle in the groin subjects it to the liability of repeated inflammation from injury, and oft-repeated inflammation is frequently productive of more serious disease. In the above case the giving of iodide of potassium to facilitate the getting of the testicle into its proper place failed, either from the constriction being too great to allow of the testicle passing through it, or to adhesive bands, the result of repeated inflammation. The latter was probably not the case, there being free movement of the gland in the inguinal canal. Was, then, operation justifiable? the division of the constricted ring or adhesive bands being probably all that would have been required to allow of the gland coming into its proper place. The position of the gland giving rise to repeated inflammation, and the patient's consequent inability of taking any but moderate exercise, would, I believe, have justified operation, if the patient had been willing to submit to it. One other point in this and the preceding case is of interest—viz., the contracted state of the scrotum on the affected side. Much of this was due to the absence of the testicle; but, secondarily, the absence of the testicle in its proper place led to the atrophy of the muscular walls of the scrotum, consequent upon dereliction of function. The muscular fibres of the dartos have a definite purpose in supporting the testes, and have the same nerve supply which regulates the erectile functions of the penis. Examples of paralysis and hyperæsthesia of this nerve-supply in producing testicular disease are occasionally met with. Of the latter the following case may be quoted:—

CASE 6. *Neuralgia Testis.*—J. S——, aged thirty-nine, was first seen on June 30th. He complained of severe pain in the right testicle, more especially when handled; quite free from pain on the left side. The report states that the pain is of a shooting character, comes on suddenly at times, and extends through the cord up to the groin, and also to just below the crest of the ilium. He had gonorrhœa six months back, which lasted six weeks, and was not followed by any swelling of testicle; no gleet remains. The epididymis on

both sides is thickened. He suffers also from slight tendency to rupture on both sides. Ordered to rub mercurial ointment into both groins every night.

July 9th.—Thickening remains only in left epididymis; pain but slightly relieved. Ordered one ounce of quinine and iron mixture three times a day, and to continue using the ointment on the left side until the thickening disappears.

Sept. 15th.—No thickening remains, and pain almost gone, but slight towards the end of the day. Both testes much drawn up, so much so that he believes the right testicle will be drawn into the abdomen, and refuses to take a cold bath in consequence. Undoubtedly hypochondriacal, having broken his matrimonial engagement in the belief of incompetence. No discharge from urethra or any nocturnal emissions.

Oct. 24th.—Has pain now but seldom; no particular spot painful; pain affects him suddenly, shooting up into the groin. Suspending the scrotum has no effect in relieving pain.

Nov. 26th.—Pain has now disappeared, but he states that "the cup and ball position of the right testicle is distressing to him," and "is certain that the testicles being drawn up taut into the neck of the canal—in fact, almost lost—is not the normal condition of matters." Still taking tonic remedies.

Remarks.—This case is interesting when compared with cases of varicocele, the pendulous scrotum being due to a paralysis of the muscular dartos, the taut condition to a hyperæsthesia of the nerves supplying the same muscle. The reason why more anxiety was expressed about the right testicle was on account of its being situated higher, and had consequently the appearance of being the first to be pushed out of the scrotum.

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DANGERS IN THE USE OF TINNED FRUITS.

BY W. N. HARTLEY, F. INST. CHEM., F.R.S.E.

PINE-APPLES, peaches, apricots, and other fruits preserved in tins and imported from America, constitute at the present time a considerable supply of food in this country. The advantage accruing from delicate fruits being obtainable at all seasons of the year at a moderate price needs no comment. I feel it my duty, however, to direct attention to the fact that the benefit anticipated is of a doubtful character, since the juices of the fruit are, under certain conditions, able to dissolve portions of the tin from the tin-plate in sufficient quantities to cause sickness. The following facts are of sufficient importance, both to the medical profession and to the general public, to warrant their being made known.

Having lately had occasion to examine some liquid vomited during sudden sickness, with the view of detecting a poison of an unknown nature, either organic or metallic, I submitted it to a very complete chemical analysis. The absence of any poisonous alkaloid was proved by the process of Stas. Arsenic, antimony, and mercury, were proved to be absent as well by Reinsch's process as by subsequent operations. A small quantity of a brown metallic sulphide was obtained, soluble in sulphide of ammonium, and reprecipitable from this solution by acids. The actual amount of precipitate was inconsiderable, only sufficient in fact to cover a very small filter. It was impossible to attempt any quantitative estimation of this substance, but it was decided to put its identity beyond doubt. This was done by reducing the sulphide to the metallic state by means of the blow-pipe. The minute globules of metal, which could not have weighed more than a few thousandths of a grain, possessed the colour, hardness, malleability, and other properties of metallic tin. The minute quantity found was that only which had escaped absorption by the system, and in all probability much less than the whole amount taken. Having no further information concerning the case, I cannot say decidedly what was the source of this metal, but I was previously aware that it is occasionally present in the juice of fruit preserved in tins—as, for instance, peaches. My friend, Dr. C. R. A. Wright, Lecturer on Chemistry at St. Mary's Hospital, informed me that he had detected it in the remains of a can of fruit to the eating of which in a tart an attack of sickness was attributed.

One of the students in the chemical laboratory of King's College—Mr. A. E. Menke—has lately been estimating, under my direction, the amount of metal present in two or three samples of tinned provisions. In the syrup from a tin of pine-apple, of about a pint in capacity, there was found a grain of tin (0·15 grm.) In a large tin of apples, a little less than 4-100ths of a grain, and in the liquor from a tin of lobster mere traces, of the metal were found. (See *Chemical News*, July 6th.)

No information of importance concerning tin-poisoning has been recorded; hence it is difficult to say what quantity of the substance may be looked upon as dangerous. It will be advisable in future to throw away the syrup contained in fruit-tins, and indeed the whole contents of every such vessel the surface of which is at all corroded.

Regarding the cause of the occasional solution of the tin, a careful examination has shown that at the point where the drop of solder seals the aperture made for the escape of steam during the preserving process a galvanic action is set up between the lead of the solder and the tin of the tin-plate. A possible remedy exists in sealing the can with a drop of pure tin.

King's College, London.

A CASE OF HYDROPHOBIA.

BY WILLIAM H. CROWTHER,
ASSISTANT MEDICAL OFFICER TO THE GENERAL DISPENSARY, ACTON.

EARLY on Saturday morning, June 29th, 1878, I was called to G. K——, aged fourteen, the brother-in-law of a publican of this place. I found him suffering from frequent convulsive movements, during which he sat up in bed and clasped the arms of the person nearest him. He complained of want of air, pain in the throat, in the right shoulder, and in the præcordial region, and of palpitation of the heart. His pupils were dilated, pulse rapid and irregular. I ordered him a mixture containing the bromide of potassium and tincture of valerian. At 6 P.M. I saw him again. He had taken, I was told, two doses of the mixture, but nothing else, as the difficulty of swallowing was so great. I noticed that the convulsions seemed now rather more frequent and violent, and that breathing upon him immediately induced them, also that what his relatives said about his difficulty of swallowing was true. When I offered him a strawberry he entreated me to wait a little, and said he felt that if he could only swallow one he could eat a hundred. Neither the bowels nor the bladder had been evacuated since yesterday (the 28th). Both at this and at my former visit he answered questions quite intelligently, but appeared to have some difficulty in speaking. I ordered him a gruel enema. My next visit was at midnight. I found he had passed about two ounces of urine, and was informed that he had been somewhat quieter, and had sucked a couple of pieces of ice. But whilst I was with him the convulsions were very strong. He was somewhat incoherent in his speech, retched occasionally, and spat frequently; he was also in a very desponding state of mind. Pulse 130. I made him inhale some chloroform, but he was so violent that it took two men to hold him down before I could manage it. Ordered ice to the spine, and fifteen grains of chloral by the rectum.

His history was as follows:—He had always been a fairly healthy lad, but had complained of feeling somewhat poorly for about a week. However, on the 27th of June, he took charge of the beershop during the landlord's absence, but in the evening he felt so unwell that he was sent to bed. On the morning of the 28th he had a dose of castor oil given him, but it was noticed that at first he expressed his inability to swallow it, and asked the attendant to let him wait a little. Shortly afterwards a cup of tea was brought him, but he was unable to take it, and expressed dislike at seeing it, and as soon as he was left alone he got out of bed and put it out of sight. He had never shown any fear of hydrophobia, and he denied that he had ever been bitten by a dog. There were two dogs in the house, one of which was said to have been "queer" at times, but nothing more, and to have

been in the habit of licking him about the face and mouth. At the inquest a girl, a playmate of my patient's, stated that on one occasion, about a month previously, the other dog had bitten him on the right hand "in play," and had drawn blood. This animal had also bitten her about the same time, but she had experienced no bad effects in consequence. I saw both the dogs, and they appeared perfectly healthy.

The lad died at 10 A.M. on the 30th, having become much quieter before the end, and having asked for and drunk a cup of beef-tea.

Autopsy, evening of July 3rd.—The superficial veins of the arms and neck were congested and stood out prominently, especially on the right side. Lungs, liver, spleen, and kidneys were much congested. Heart empty. Stomach all but empty; a patch of its lining membrane on the anterior wall was puffy and emphysematous; this was apparently due to putrefaction. There was a dark-coloured patch on the inner surface of the posterior wall. Trachea and fauces vascular. Meninges of the brain congested, and effusion into the ventricles. There was so much opposition on the part of the friends of the deceased to my opening the skull that I did not venture to proceed to examine the spinal cord as well as the brain. I detected no scar on the body. Cadaveric rigidity came on about an hour after death, and was still present when I made the post-mortem examination.

The peculiarity of the case is that there is no history of his having been bitten or scratched, or in any way inoculated with the saliva of a rabid animal. Erichsen, however, mentions a similar case.

Mr. H. B. Lingham, of Acton, also visited the deceased on June 29th, and gave me the advantage of his opinion.

Acton, W.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tam aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

STONE IN THE BLADDER; LITHOTOMY (ASTON KEY'S OPERATION); CURE.

(Under the care of Mr. BRYANT.)

THE following notes were taken by Mr. H. Clowes.

Francis H——, a strong-looking man, aged seventy-six, coachman, was admitted June 6th, 1877. His family history was good. His father died of dropsy, but there was no history of stone. About eight years previously the patient noticed that the urine was coloured with blood, but he did not observe any sediment, nor had he passed any gravel or felt pain. Two years later the urine ceased to be coloured with blood, and from this time he experienced pain at the point of the penis after micturition. He had never had pain about the region of the kidneys or bladder. He had frequently noticed that during micturition the stream had suddenly stopped and then gone on again freely, but he did not remember when he first observed this. He had been troubled with incontinence of urine for two years past, being unable to hold his urine more than half an hour. At times, however, he was much better, and could retain it longer. He did not seek medical advice until about a week before admission, when he was informed he was suffering from stone in the bladder.

On admission he was obliged to micturate about every two hours, but until the previous week he was unable to hold his urine more than half an hour. Up to this time pain after micturition was very severe. He stated that urine was longer coming when micturating during night than in the daytime. An examination of urine which had been voided some time presented an alkaline reaction, with a slight trace of albumen; sp. gr. 1020. There was a little sediment, which proved to be triple phosphates. General health very good. An examination with a sound detected stone. Urine escaped when the sound was passed. From examination and previous history the existence of more than one stone was suspected.

On June 20th a lithotrite was introduced, and a stone 1¼ inch in diameter was found. The presence of others was suspected, but owing to the extreme irritability of the bladder, which contracted tightly round the instrument, this matter could not be decided.

On the 26th chloroform was administered and lithotomy performed. The straight staff was used. Two stones were taken from the bladder, the larger being of an irregular oval shape, and the long diameter 1¼ inch. The smaller was about half the size, and came out in fragments. There was but little hæmorrhage. On further examination, the fragments which were thought to form a second stone proved to be a piece broken off from a single calculus, for no second nucleus could be discovered. The calculus and the fragments broken from it weighed 374 grains. It presented, on section, a small dark nucleus of oxalate of lime, around which were arranged several concentric laminæ. The nucleus was composed of a fawn-coloured material loosely put together. The other laminæ were more compactly arranged, and darker in colour.

Next day the patient looked well. There had been but little bleeding. Urine passed through wound freely. Temperature 98·4°; pulse 120.

An injection of morphia was given at midnight on the 28th, and patient slept until 6 A.M. He vomited a little. On the 30th, the cough which had troubled the patient on the 28th was again troublesome, but relieved by medicine. Urine passed freely through wound, but none through urethra as yet. Patient felt comfortable, and had no pain. Temperature 98°; pulse 84.

On July 1st an enema of castor oil was given, which acted well. Urine came away freely untinged with blood. On the 3rd the patient was very well; had passed a good night. Urine still passed through wound, only patient had a curiously intermittent pulse, which was strong, but varied about two beats a minute. Temperature 98·4°; pulse 92. On the 6th the urine was a pale-straw colour, cloudy, neutral, sp. gr. 1025, slightly albuminous, with a sediment of pus and epithelial cells. On the 8th the urine began to pass by the urethra. Two days later all the urine passed through the urethra. The wound looked clean and healthy. Patient slept well. On the 16th the wound was almost healed. Patient stated he had had no pain since the operation. On the 20th the wound was completely healed. The patient could hold his water for an hour or more. It passed sometimes involuntarily when he coughed. On the 26th the patient looked very well, and felt strong. Appetite was good. He retained his urine for more than three hours this day.

On Aug. 9th the patient left the hospital. The wound was completely healed, and urine could be retained three hours. He walked up and down the ward on the arm of a friend, and his general health was good.

STONE IN THE BLADDER; LITHOTOMY, BY ASTON KEY'S OPERATION; CURED.

The following notes were taken by Mr. Frederick Bayes.

Joseph H——, a strong, healthy-looking man, aged fifty-three, a shoemaker, was admitted on June 25th, 1877. His father died of paralysis, and mother was very delicate, but he did not know the cause of her death. His grandfather and an uncle had stone, but he knew of no history of gout or rheumatism. His sister died of cancer, this being the only case of cancer, to his knowledge, in the family. The patient stated that he drank and smoked very little. About five years ago he was first troubled with severe pain, extending from the kidneys down to the bladder, and on the front and inner parts of the thigh. He had had three or four similar attacks during the past five years, the pain being sometimes most severe on the one side, and then on the other. Shortly after the first attack he passed blood in his urine, the quantity being much increased if he walked far. The pain lasted for about a day, and then nearly ceased. Almost at the commencement of the pain he passed a deposit in his urine, which he compared to brick-dust.

About two years ago he was sounded, but no stone was detected. At this time he experienced considerable pain whilst micturating, the stream often stopping suddenly. Five weeks ago he had a long journey in a cart, and was a good deal shaken; this brought on a bad attack of pain.

He was then sounded, and told he had stone. He had kept at his work (which was very light) almost all the time he had been unwell.

On admission the patient was sounded, and stone was detected. He could hold his water three or four hours, and usually micturated once or twice during the night.

On the 26th chloroform was administered, and the stone was measured by the lithotrite, the diameter being found to be three-quarters of an inch. Lithotomy was performed with the straight staff, an incision being made from the median line about an inch above the anus downwards, and to the left side to a point opposite the middle of the anus. A flat ovoid stone was removed, which measured 1⅛ in. long, 1¼ in. broad, and ⅝ in. thick.

A section of the stone displayed a dark mulberry centre of oxalate of lime; this was surrounded by an irregular zone of fawn-coloured uric acid, then a thin layer of oxalate, a larger quantity of uric acid, and, finally, a thin layer of phosphate of lime. The stone weighed 279 grs.

He passed a fairly good night. Water passed very freely through the wound. He vomited several times, but seemed pretty well next morning. He passed a good deal of blood during the night of the 28th through the wound, and also by the urethra. Had frequent and rather severe attacks of pain in his penis. Pulse 144; temperature 99·8°. On the 30th a clot came away from the bladder.

On July 5th he passed water through the wound; appetite good; bowels had not been opened since June 29th. On July 6th the bowels were opened by enema. He passed a little water through urethra. Bowels had not been open again until the 9th, when one ounce of castor oil was given. Passed a considerable quantity of water per urethram. On the 13th the bowels acted, and all pain was gone. On the 16th he could hold his water two or three hours, and passed none by the wound. The bowels had not been open until the 19th, when the wound was nearly healed. Temperature 97·4°; pulse 84. On the 27th he said a small quantity of white matter escaped when he made water. On the 28th the urine was examined. It was rather cloudy, and had a quantity of deposit; there was a little albumen. Microscopical examination of the deposit showed it to consist chiefly of pus-cells. There was slight pain at end of penis on completion of micturition.

On Aug. 7th the patient felt comfortable. Had sat up for a short time on the previous day. There was still some deposit in the urine and pain in the penis after making water.

He left the hospital on the 9th.

Temperature was normal after operation for three days, when it went up to 99·6°, but it dropped the next day, and remained normal.

MANCHESTER ROYAL INFIRMARY.

LARGE FIBRO-CYSTIC TUMOUR OF UTERUS; ABDOMINAL EXPLORATORY INCISION.

(Under the care of Dr. THORBURN.)

FOR the following notes we are indebted to Mr. F. A. Southam, resident surgical officer.

Ann G——, aged forty-eight, widow, was admitted on Dec. 11th, 1877, suffering from a tumour in the abdomen. She had had six children, the youngest of whom was twenty years of age. Menstruation regular up to nine months previous to admission, and then ceased; no history of any flooding. Tumour first noticed about two years before, and gradually increased in size till June, 1877, and then grew rapidly. Latterly there has been considerable dysuria, and at one time œdema of the left lower extremity. On external examination, a large tumour could be felt occupying the centre of the abdomen, smooth, uniform, and not very movable. There was fluctuation on the left side only, but the right side was solid and hard. On examination per vaginam, a large hard mass could be felt in the posterior part of the uterus, and the sound passed for four inches and a half into the uterine cavity.

Paracentesis was performed on Nov. 3rd, and again on Dec. 15th. On the first occasion six pints, and on the second nineteen pints, of greenish-coloured serum, with a slightly purulent deposit, were removed. After the evacuation of the fluid, a large solid tumour could be felt, with distinct outline, rising above the umbilicus, occupying the centre of the abdomen, and descending into the cavity of the pelvis.

From the preceding symptoms, a fibroid tumour of the uterus was diagnosed, and, in addition, a cyst containing fluid, either a distinct ovarian cyst, or forming part of the uterine tumour. It was accordingly determined to make an exploratory incision, with the view of removing the cystic tumour, if, as was not improbable from its large size, it was connected with the ovary and separate from the uterine fibroid. If, on the other hand, it were found connected with the fibroid, the operation would be abandoned, as in that case the fibro-cystic nature of the tumour connected with the uterus forbade any operative interference.

On Feb. 4th the usual ovariotomy incision was made by Dr. Thorburn, and the peritoneal cavity opened under carbolic spray. On introducing his hand and making an intra-abdominal exploration, the cystic and solid portions of the tumour were found continuous and inseparable, springing from the uterus, and unconnected with either ovary. The cystic portion was multilocular, and several of the cysts, which were of small size, were opened, and about one pint and a half of fluid evacuated. The necessary information as to the uterine and consequently non-removable nature of the cyst having been thus obtained, the incision was closed with silver sutures and dressed with carbolic glycerine, an india-rubber drainage-tube being left in the largest cyst which had been opened.

The after-treatment was the same as that usually adopted by Dr. Thorburn in his cases of ovariotomy, the patient being kept well under the influence of morphia for some days, and the wound dressed for the first time on the tenth day after the operation. It was then found that the whole of the incision, with the exception of the place where the drainage-tube was inserted, had united by first intention. There had been no discharge from the wound, the dressings being perfectly sweet and simply stained with a little clotted blood. The drainage-tube was removed, and in six days later the incision was entirely healed. The temperature never rose above 100·4°, nor the pulse above 108, and the patient was soon convalescent, the operation not being followed by a single unfavourable symptom.

On Feb. 27th the patient was again tapped, and fifteen pints of thick yellow purulent fluid removed. She left the hospital on March 9th, and when last heard of was progressing favourably.

OVARIOTOMY; RECOVERY.

Esther M——, aged forty-six years, married, a stout, healthy-looking woman, was admitted on Jan. 30th, suffering from an ovarian tumour. She has had one child, now twenty-six years of age. Catamenia regular. Had an attack of acute rheumatism sixteen years ago. Loud presystolic murmur audible at the cardiac apex. Tumour first noticed twelve months ago. Had rapidly and uniformly increased in size; freely movable; no evidence of any adhesions. Fluctuation and impulse very distinct. Absolute dulness in front, with resonance in either flank. The uterus was small, situation normal, cervix somewhat atrophied. Paracentesis was performed three times—viz., in July, September, and January; 24, 30, and 25 pints of pale, clear, glairy fluid being removed on each occasion.

March 25th.—Ovariotomy was performed by Dr. Thorburn under the carbolic spray, assisted by Mr. Heath and Mr. Lund. Bichloride of methylene was administered by Mr. Whitehead. Owing to the existence of firm adhesions between the anterior surface of the cyst and the abdominal parietes, some difficulty was experienced in deciding whether the peritoneal cavity had been opened or not, and in distinguishing between the parietal peritoneum and the wall of the cyst itself. The cyst having been emptied, and all adhesions carefully broken down by the fingers, the pedicle was secured in two halves by a strong silk ligature, cut short, and allowed to drop into the abdominal cavity. The pedicle and the edges of the abdominal wound were well rubbed over with carbolic glycerine, and the incision closed with silver sutures, including the peritoneum. The wound was dressed with lint dipped in carbolic glycerine. The cyst was unilocular, and seventeen pints and a half of fluid were removed at the time of the operation.

The operation was not followed by a single bad symptom. There was a very little sickness the same afternoon. Evening temperature 99·8°; pulse 108. The patient was kept well under the influence of morphia, administered subcutaneously, and the temperature never rose above 99·8°,

nor the pulse above 108. The wound was dressed for the first time on the tenth day, when it was found to have completely healed, and all the sutures were then withdrawn. The bowels were moved for the first time on the twelfth day by a simple enema, a teaspoonful of castor oil having been given the preceding evening. On April 10th, convalescence, which had up to this time continued uninterruptedly, was complicated by a slight attack of phlegmasia dolens in the left leg, which, however, soon disappeared under appropriate treatment. The patient left the hospital perfectly well on May 2nd.

DORSET COUNTY HOSPITAL.

SUCCESSFUL CASE OF PRIMARY AMPUTATION OF RIGHT LEG BELOW THE KNEE, IN A PATIENT AGED SEVENTY-FIVE.

(Under the care of Mr. A. EMSON,)

FOR notes of this case we are indebted to Mr. Herbert J. Capon, house-surgeon.

Sophia S——, aged seventy-five, was admitted Oct. 30th, 1877. She was a tall, thin, and intelligent woman, and gave the following history. In August, 1874, while ascending some steps with a pail of water, she slipped and bruised her right ankle-joint. She felt something crack, which she supposed was the small bone of her leg. She did not lie up in bed, but continued with her household work as usual, resting when she could. She experienced much pain a little above the inner ankle, which increased, and caused her to seek medical advice in the following March. The painful spot did not seem to improve under local applications, but a crop of pimples appeared, which gradually extended into an open wound, with an elevated base. Caustics were then applied, and in September it was half as large as one's open hand, when she took to her bed. The ulcerated surface extended all around the leg, but the pain was confined to the original spot above the inner ankle. Her foot swelled, and in September, 1877, the bone was exposed. In the beginning of October, while attempting to walk with crutches, one crutch slipped, and with but very slight force her leg was broken across at the seat of the wound. It gave her so little pain that she did not know a fracture had occurred till she observed the end of the leg and foot so freely movable when in bed.

On admission her foot and about three inches of the bones of the leg were doubled on to the upper part of the leg at nearly a right angle. The soft and pulpy-looking bone was quite exposed. The odour was very offensive. The foot was very œdematous, and sensation was diminished. The femoral glands were not enlarged.

Oct. 31st.—After a consultation it was decided to amputate, which Mr. Emson accordingly did. Esmarch's elastic bandage and tourniquet was applied. Antero-posterior flaps were made, and the bones were divided about one inch below the tubercle of the tibia. The tissues were excessively soft, almost pulpy. Hæmorrhage was very slight. From the degenerated condition of the vessels secondary hæmorrhage was feared, and a tourniquet was accordingly placed in readiness over the femoral artery. She rallied exceedingly well. Evening temperature 101°.

On Nov. 1st there was a slight oozing of blood, about two ounces, during the twenty-four hours. The patient was comfortable. Temperature 100·2°; pulse 102. Had a quinine and iron mixture three times a day, and an opiate to relieve pain. Diet consisted of milk, three eggs, and an ounce of brandy. On the 2nd the discharge was more sanious. Temperature 100°; pulse 114, intermittent. She slept fairly well; was very despondent. Ordered ten drops of the sedative solution of opium when pain was severe. On the 4th the wound was suppurating freely. She slept fairly well, and was more cheerful. Temperature 99°; pulse 102. Bowels open. On the 9th she was doing very well. She had a small bedsore over the sacrum, also one over the right great trochanter. Temperature 99°. On the 17th temperature rose to 100° morning, 99° night. The bedsores, which had increased in size to that of a crown-piece, were painted with equal parts of collodion and castor oil. The stump looked well. All ligatures were taken away but one. From this time up to Dec. 21st there was a gradual improvement both in the stump and bedsores, which latter were completely healed over. The temperature from this time to the 30th was between 98·4° and 99°.

On Jan 1st the patient was about the ward with crutches, but could not make very free use of them. On the 13th there were two small spots on the cicatrix of the stump not healed over, about as large as a shirt-button. She was discharged on Jan. 17th, the stump having completely healed.

The advanced age of the patient and the uninterrupted progress of the case make it unusually interesting. The dressings throughout consisted of terebene dissolved in olive oil (1 in 20). Since her discharge she met with a slight accident by falling into the fender while attempting to remove a kettle from the fire, and scalded her hand as well as bruised her stump, but has completely recovered.

PROVINCIAL MEDICAL SOCIETIES.

BRADFORD MEDICO-CHIRURGICAL SOCIETY.—June meeting; R. H. Meade, Esq., F.R.C.S., President, in the chair. Dr. GOYDER exhibited an Ovarian Tumour removed by Mr. Spencer in the wards of the Bradford Infirmary on June 1st. The interesting facts in the case were that the tumour consisted of two parts: an upper, harder portion, consisting of a multitude of small cysts, so condensed as to appear solid; and a lower, large, single cyst, filled with the usual fluid. The woman presented herself at the out-patient department, under Mr. Goyder, for a fluctuating abdominal swelling, which, under treatment, greatly diminished, bringing to light a hard tumour, fixed and immovable, in the left hypochondrium. Subsequently the fluctuating swelling increased, and the patient was admitted into the house. A consultation, by Mr. Spencer, Dr. Bell, and Dr. Goyder, was held, and the fluctuating swelling pronounced to be ovarian, but the character of the hard portion was undetermined. After tapping and some weeks' interval the operation was performed successfully; the tumour was found to be as stated above, but the hardened portion was fixed by inflammatory adhesions to the abdominal wall at the left hypochondrium, and with some difficulty removed; this fact had rendered the diagnosis at first obscure.—The President cited a similar case in which the tumour was movable except at its upper part, where a hardish substance, in size and shape like a trencher, was immovably fixed, and seemed separable from the movable part; yet on operation it was found to be part of the ovarian growth, but fixed by adhesions, as in the former case.—Mr. FOSTER detailed a case of Tetanus. Patient, aged forty-eight, had sustained a rent-like wound, six inches long, over the left patella. By interrupted suture the wound healed in a week. On the eighteenth day after the accident he struck the knee against his bed, complained of pain, and said he had also a cold and sore-throat. On the nineteenth day he developed difficulty of swallowing, stiffening of the masticatory, facial, and zygomatic muscles. On the twentieth day the injured leg, the muscles of the back and abdomen, were rigid; this state increased and persisted till death, on the twenty-ninth day. The pulse varied from 120 to 140. The treatment was by hypodermic injections of morphia and large doses of bromide of potassium and strong liquid nourishment. Mr. Foster said the case was a typical one. There seemed no cause of irritation in the wound itself, which healed perfectly. He then discussed the alliance and differentiation of this disease with hydrophobia and convulsions, and spoke of the view of its origin in injury to nervous fibres implicated in the wound.—Dr. Goyder attributed the origin of this disease to laceration, possibly of ligament as well as nerve-fibre. He said experience dictated to him in excessive laceration of fingers rather to amputate than risk tetanus by attempts to heal. He gave cases in illustration.—Mr. Mossop concurred that laceration of tissue was the exciting cause of tetanus. He cited the case of the death of his father from tetanus, coming on eleven days after laceration of the leg by a hook. He died on the seventeenth, erysipelas supervening.—Mr. Miall did not think that crushed fingers should be amputated. He had saved many by careful strapping; he had not seen enough of tetanus to make it a motive for amputation.—Dr. Whalley had seen one death from tetanus due to laceration of forearm, in which opium failed. The mischief seemed due to

irritation of the motor centres, probably from laceration, and where impure blood and constitutional peculiarity existed he would hesitate to amputate, as cases of laceration recovered without it. Calabar bean and conium were said to be reliable remedies.—The President had seen many cases of tetanus. He thought also there must be some predisposing constitutional cause. He had seen many lacerated wounds without tetanus, but if a nerve were injured there was danger of its arising. He had seen cases recover; these were generally milder and chronic. There did not appear to be any satisfactory remedy; cases died do what one would. —Mr. Foster, in reply, said that Baron Larrey noticed that large numbers of soldiers had tetanus who were left wounded on the field of battle on a frosty night, the cold being the cause. In the late Russo-Turkish war the greater number of wounds with tetanus were superficial. He thought that conservative surgery, and not amputation, was the advisable practice.—Dr. Johnston read a paper on "Compression of the Aorta in Post-partum Hæmorrhage." He said that, while compressing the uterus in a case of this kind, other means having failed, and feeling the aorta pulsating under his hand, he was led to compress it, and with such immediate and favourable results that he had followed the plan in several subsequent cases, and with success. After detailing the causes and consequences of hæmorrhage, he said the advantages of compression of the aorta were that the flow of blood was controlled to the parts below it, time thereby being afforded for the natural uterine contractions to recur, or the use of other expedients to that end; and the danger of syncope was avoided by confining the blood to the heart and brain. He deprecated the use of stimulants as tending rather to increase the hæmorrhage than restore the patient.—Dr. Goyder said the plan was one easily put in practice, and might prove a valuable assistance in controlling hæmorrhage.—The President asked where the pressure was applied.—Mr. Miall said the suggestion was a good one, but had been made before. He himself had employed it by pressing on the uterus and the aorta at the same time. It might not succeed perfectly, but it gave time to resort to other expedients.—Dr. Whalley thought the plan a good auxiliary. By kneading the uterus or injecting it with cold water, he had never lost a case by post-partum hæmorrhage.—Mr. Foster said the mode was scientific, and commended itself to his judgment. His experience was that, with every precaution, patients would die. He avoided stimulants, having seen hæmorrhage increased by them.—Mr. Mossop said the treatment of hæmorrhage was medicinal and by external applications. The principle of Dr. Johnston was accurate, but pressure on the uterus controlled the flow from the aorta as well. Ice and the hand in the uterus had succeeded in his practice.—The President said the object of his question was that in applying pressure to the aorta you pressed on the uterus as well. The suggestion was valuable. Hæmorrhage should be prevented, as well as stopped when it did occur. He invariably gave a dose of ergot and opium before removing the placenta, and allowed a pain to assist the removal of the latter; he hence had no cases of post-partum hæmorrhage. The cases he had seen were where the patient had been left too soon. Clearing the uterus free of clots with the hand dipped out of ice-cold water generally checked it at once.—Dr. Bell spoke of the value of the galvano-electric current in rousing the uterus to contraction in extreme cases.—Mr. McKenzie spoke of the necessity of insisting on patient's undressing towards the close of labour; much time was lost where this was neglected.—Dr. Johnston, in reply, said the point of pressure should be above the fundus uteri. The fact he wanted to impress was that this plan gave time for the uterus to contract.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.—The fourteenth and concluding meeting of the session took place on May 17th, at which Dr. GAIRDNER addressed the Society on "Cautions in respect of the so-called Antipyretic Treatment of Continued Fevers." After glancing at the history of the treatment, he gave an exposition of what the antipyretic treatment was, taking Liebermeister as its modern exponent, and describing the system for the most part in that author's words, as contained in his article on "Typhoid Fever" in Ziemssen's Cyclopædia. As there detailed, the antipyretic treatment consisted in cold baths, repeated as often as the temperature exceeded 102° F., which, in the majority of cases, was from four to eight times a day, and in severer cases every two hours—even up to 200 baths in an individual case. Coincidently with the baths was given quinine, in doses of twenty-two to forty-five grains; and in case the temperature was not sufficiently controlled by these means, digitalis, in doses from eleven to twenty-two grains, or veratria to the point of decided nausea or vomiting. The antipyretic, whether bath or drug, was alternated with a stimulant, to meet the temporary prostration resulting from the remedies. In addition to this antipyretic treatment, there was also a specific treatment—viz., calomel, in ten, and then in seventy-three grain doses, repeated to three or four times, in all cases seen before the ninth day of the fever. All this treatment was followed as a matter of routine, and it had to be considered as a whole, the statistics not allowing them to consider it in parts. As such, it was a prodigious innovation on modern ideas as to treatment of fevers. Dr. Gairdner then proceeded to show that when last in charge of fever wards he had, by a treatment nearly, though not quite, expectant, directed entirely to emergencies and casualties, attained a rate of mortality of 9·3 in 108 cases, and 11·5 in 703 cases of typhus; that Dr. Russell by the same treatment showed a mortality in Parliamentary-road Fever Hospital of 9·05 in typhus during the next two years. He questioned whether such favourable results, as a whole, had been attained in any hospital in this country or elsewhere by the antipyretic or any other treatment in typhus fever. He was, however, willing to yield up his conviction if it could be shown that the antipyretic treatment would reduce the mortality of typhus much below 10 per cent., provided (1) that the diagnosis was exact, (2) that there was no selection of cases, and (3) that all cases, *including those admitted moribund*, were given in the statistics. These were the principles on which his own and Dr. Russell's statistics had been framed, and in every one of these particulars they were left in doubt as to Liebermeister's figures. He compared the mortality of typhoid fever under the antipyretic treatment with Dr. Russell's figures, showing that Liebermeister's prodigious *apparatus medicaminum* was not required to keep down the mortality in that fever.—The subject was discussed by Dr. Russell, Dr. McCall Anderson (who favoured a modified antipyretic treatment), Dr. Scott Orr, Dr. Robertson, Dr. Perry, and several others.—In replying, Dr. Gairdner further pointed out that the degree of surface-cooling of the body was not a measure of the general reduction of the combustive process, which might, after all, be really increased.

THE GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

Second Session 1878.

THURSDAY, JULY 4TH.

THE final sitting of the Council was held to-day under the presidency of Dr. Acland.

Dr. APJOHN brought forward the following motion: "That lists of the persons who are entitled to registration shall be forwarded to the three Branch Councils, and when the registration fees are paid to the local registrars, these registrars shall furnish the General Medical Registrar with the names and addresses of the said several persons, and the General Medical Registrar shall insert these in the Medical Register." If, he said, the plan proposed in the 16th clause of the Bill were adopted, it would have the effect of extinguishing the Branch Councils, and he did not believe they were prepared to adopt any legislation that would have that effect. There had been, however, a rumour that the Government had been earwigged upon the subject; at all events, the Branch Council in Ireland was determined to resist legislation of that description, which would have the effect of centralising in London the functions of the Medical Council, including registration.

Dr. QUAIN said the general desire was to restore the system of registration to what it had been, and the only question was how that could best be done. He ventured to suggest that the following motion would best meet the case

"That to the words 'medical registrar,' on page 2, line 30, and elsewhere, the words 'local registrar' be added; and that Clause 8, page 4, line 28, subsection 6, be omitted, and the following subsection inserted in place thereof: '6. The local registrars shall keep the local registers in such form and manner, and shall perform such duties in relation to registration under this Act, as the General Medical Council shall from time to time order.'"

Dr. APJOHN said he would withdraw his motion in favour of that suggested by Dr. Quain.

The motion was then put and carried.

Mr. MACNAMARA brought forward the following recommendations from the Registration Committee:—"1. That the invested funds of the several Branch Councils should be consolidated into one capital fund, vested in trustees on behalf of the General Medical Council. 2. That the local registrars should continue, as at present, to register and receive registration fees in their respective localities, but should, without loss of time, transmit such fees to the Medical Registrar when they amount to ——. 3. That the treasurers of the General Medical Council should transmit from time to time to the registrar for Scotland or Ireland such sums as may be necessary to defray the current expenses of the local offices. 4. That the salaries of the registrars of the Branch Councils for Scotland and Ireland should be paid by the treasurers of the General Medical Council. 5. That fees for attendance on Branch Councils should also be paid by the treasurers of the General Council at the end of each current year."

Dr. A. WOOD objected to the proposition of the Registration Committee, which, he said, tended to promote centralisation in its worst form, and would be an encouragement to the Branch Councils to act extravagantly. He hoped that the Council would adhere to the mode of administering the funds that had been adopted during the last twenty years.

Dr. QUAIN said that, as treasurer of the Council, it was his duty to look after its funds. The Irish Branch Council had been encroaching considerably on its capital, and he could well understand Mr. Macnamara putting his name to a document which would enable him to draw out a very considerable sum. (Laughter.) If all the money were put together in the way proposed, it would be quite unnecessary for the Irish Branch Council to sell out its stock as it had done. The receipts of the English Branch Council amounted to £25,000 and the expenses to £4000, or about 16 per cent. (There were twelve members of the English Branch Council, six in the Scotch, and six in the Irish.) In Scotland the expenses amounted to 28½ per cent., and in Ireland to 35 per cent. He believed that many unnecessary meetings of the Branch Council had been called. One of them had been summoned on a requisition signed by Sir Dominic Corrigan and Mr. Macnamara simply to call the attention of the President of the Council to a speech delivered in the House of Commons. It was in that way that the expenses had been increased. He protested against any proposal that the capital should be put into a common fund.

Mr. MACNAMARA said he was delighted to find that for once the English repudiated the idea of receiving Irish money. (Laughter.) The suggestion, however, had come from Mr. Teale.

Dr. APJOHN maintained that the Irish Branch Council had very rarely met without good reason.

Dr. A. SMITH thought that England received ten times as much as Scotland or Ireland, and hence their expenses were proportionately smaller. He regretted that the Committee had done nothing towards solving the question of registration that had been referred to them.

Sir D. CORRIGAN said that the Branch Councils would have to look after their own interests, or they would be swamped by England.

Dr. HUMPHRY moved, as an amendment to the motion for the adoption of the report, "That the moneys be paid and applied in accordance with Clause 15 of the existing Act."

Dr. QUAIN seconded the motion.

Sir W. GULL said he purposed on a future occasion to move that in any future changes in the constitution of the Council it be enacted that the members receive no fees for their attendance, either at the Branch Councils or at the Medical Council, beyond reasonable travelling expenses. He thought that argument had lately been supplied in support of such a motion.

Dr. HUMPHRY'S amendment was then put and carried by a large majority.

Mr. SIMON moved the adoption of the following report of the Committee on the clauses of the Government Bill relating to Indian, colonial, and foreign qualifications:—

"The Committee finds that in the Bill (as ordered by the House of Commons to be printed on June 13th) Clauses 5 to 7 do not entirely correspond to the intentions of the Council, as hitherto expressed, and recommends that alterations to the following effect be made in them:—

"In Clause 5, page 2, lines 39 to 44, omit from 'either is' to 'kingdom or elsewhere,' inclusive, and let the clause only provide that the person must have been *bonâ fide* domiciled in the British possession where his diploma was obtained.

"In Clause 6, page 3, lines 6 to 11, after 'British subject or who,' omit words from 'has' in line 6 to 'or elsewhere' in line 11 inclusive, and substitute, 'if a British subject, has practised medicine and surgery for more than ten years elsewhere than in the United Kingdom or a British possession.'

"In Clause 7, page 3, line 34, after 'above defined' insert 'or was not obtained by him under the conditions which this Act prescribes.'

"The Committee observes that a former clause which the Council had approved, and which was intended to enable the Council in certain very exceptional cases regarding foreign and colonial practitioners to dispense with the production of a recognised medical diploma, has been removed from the Bill; and the Committee has reason to believe that this removal was due to objections which were taken to the clause.

"The Committee, in reporting on the present clauses, and adverting particularly to Clause 6, which has for its object to provide in the United Kingdom the most liberal treatment which can be deemed right for all trustworthy foreign diplomas, thinks it would not be fulfilling its duty if it did not advert to a measure of opposite tendency which is now under the consideration of the French Legislature with a view to its adoption in France. The Committee, both in justice to the registered practitioners of this country, and in solicitude for social interests which are common to both countries, would deprecate that kind of legislation as inadmissible between England and France; and the Committee suggests to the Council that it should move Her Majesty's Government to bring under notice of the Government of the French Republic the legislation which this country is proposing in the same international matter.

"Clauses 5, 6, 7, amended as the Committee recommend, might stand as subjoined:—

"5. Where a person who has been *bonâ fide* domiciled in a British possession shows that he holds some recognised medical diploma or diplomas (as hereinafter defined) granted in a British possession, and that he is of good character, such person shall, upon payment of the registration fee, be entitled, without examination in the United Kingdom, to be registered as a colonial practitioner in the Medical Register.

"6. Where a person who is not a British subject, or who, if a British subject, has practised medicine and surgery for more than ten years elsewhere than in the United Kingdom or a British possession, shows that he has obtained some recognised medical diploma or diplomas (as hereinafter defined) granted in a foreign country, and that he is of good character, and either continues to hold such diploma or diplomas or has not been deprived thereof for any cause which disqualifies him for being registered under this Act, such person shall, upon payment of the registration fee, be entitled, without examination in the United Kingdom, to be registered as a foreign practitioner in the Medical Register.

"7. The medical diploma or diplomas granted in a British possession or in a foreign country, which are to be deemed such recognised medical diploma or diplomas as are required for the purposes of this Act, shall be such medical diploma or diplomas as may be recognised for the time being by the General Medical Council as entitling the holder thereof to practise medicine and surgery, including therein midwifery, in such possession or country, and as furnishing sufficient guarantees of the possession of the requisite knowledge and skill for the efficient practice of both medicine and surgery, including therein midwifery. If a person is refused registration as a colonial practitioner or as a foreign practitioner, the Medical Registrar shall, if required by him, state in writing the reason for such refusal, and if such reason be that the medical diploma or diplomas held or obtained by him is or are not such recognised medical diploma or diplomas as above defined, or was or were not obtained by him under

the conditions which the Act prescribes, such person may appeal to the Privy Council, and the Privy Council, after hearing the General Medical Council, may dismiss the appeal or may order the General Medical Council to recognise such medical diploma or diplomas, or any of them, and such order shall be duly obeyed."

Dr. STORRAR seconded the adoption of the report, which, after a short discussion, was adopted.

Dr. QUAIN then moved, "That with reference to the Bill entitled Medical Act (1858) Amendment Bill, as ordered by the House of Commons to be printed on June 13th, the Council desires to express its wish that the Bill entitled the Dental Practitioners Bill be brought into conformity with the clauses of the Lord President's Bill."

Dr. PITMAN seconded the motion, which was adopted.

The resolutions passed by the Council in committee were then brought up, and, on the motion of Dr. HUMPHRY, seconded by Dr. ROLLESTON, it was resolved, "That they be in substance adopted, and that they be remitted to the Executive Committee to be arranged in order, and transmitted by the Committee to the Lord President of the Privy Council."

On the motion of Dr. A. WOOD, seconded by Dr. HUMPHRY, it was resolved, "That the Council give to the Executive Committee power to make such changes in the arrangements and conduct of the business of the office as the Committee may think desirable."

Mr. SIMON moved, "That the Council, referring to its resolution of July 3rd, remits to the Executive Committee to prepare for it, before its next meeting, a report on the present constitution and working of the Council, and on the changes (if any) of constitution by which, in the opinion of the Executive Committee, the Council might be rendered more efficient for the duties which it has or will have to discharge; and that the Executive Committee be requested to let the report be in circulation among members of the Council at least one month before the meeting at which it shall be discussed."

Sir W. GULL seconded the motion, which was adopted without discussion.

On the motion of Dr. A. SMITH, seconded by Dr. A. WOOD, it was resolved, "That the powers and duties heretofore delegated to the Executive Committee be vested in the said Committee until the next meeting of the General Medical Council."

Dr. A. SMITH moved, and Mr. TURNER seconded, a vote of thanks to Dr. A. Wood for his services as Chairman of the Business Committee, which was unanimously carried.

Dr. WOOD, in acknowledging the vote of thanks, said that in former days his duties as Chairman of the Business Committee were very laborious, but it was only justice to state that since the appointment of Mr. Miller as registrar they had become comparatively light.

Votes of thanks were then passed to the Treasurers (Dr. Quain and Dr. Pitman), and to the Lord President of the Council, for the amount of time and trouble bestowed by his Grace upon the Medical Acts Amendment Bill.

Dr. A. WOOD moved a vote of thanks to Dr. Acland, the President, for his efficient services during the present session. The amount of labour and attention bestowed by the President upon the affairs of the Council was, he said, perfectly marvellous, and the Council was particularly fortunate in having such a president at its head. (Applause.)

The PRESIDENT, in acknowledging the vote of thanks, said that if as President he had been able to discharge with satisfaction the duties of his office, it was because the confidence reposed in him by his colleagues was such that it was the only course he could possibly adopt.

The session then closed.

BEQUESTS ETC. TO MEDICAL CHARITIES.—Mr. William Chapman Hewitson, of Oatlands-park, Surrey, bequeathed £10,000 to the Newcastle-upon-Tyne Infirmary, £2000 to the Surrey County Hospital at Guildford, £1000 to the Metropolitan Convalescent Institution, and £1000 to the Charing-cross Hospital. The Dundee Royal Infirmary has received £1032 1*s.* 5*d.*, being part of the "residue" of the estate of Mr. James Sampson. Miss Margaret Alexander bequeathed £100 and the "residue" of her estate to the Royal Infirmary, Aberdeen. The Stourbridge Dispensary has received £100 under the will of Mr. Henry Rogers, of Hagley. The Halifax Infirmary has received £100 under the will of Mr. C. G. Ellis.

Analytical Records.

THEVENOT'S CAPSULES.

(MESSRS. H. K. EDGE & CO., KING WILLIAM-STREET.)

The method of enclosing volatile and unpleasant liquids in gelatine capsules is one of the most notable improvements in modern pharmacy. To all but the few people who cannot take pills, the method offers very great advantages over a nauseous potion, or a draught uncertain in action from the possible volatilisation of its chief constituent. The method has been very widely applied by Thevenot of Paris, whose preparations are imported by Messrs. H. K. Edge and Co.; and their list of the drugs thus supplied is a very long one. For some of these this method of administration is most valuable: such as turpentine and apiol, of which three grains are contained in each capsule; and reduced iron, so apt to deteriorate by exposure. With others, however, the encapsulation seems superfluous, and even disadvantageous: as, for instance, salicylate of soda, of which 2½ gr. are contained in each capsule, eight capsules being needed for a full dose; and cod-liver oil, of which at least twenty or thirty capsules would be needed. A series of bottles of capsules are supplied in a neat case, which contains, in addition, a packet of mustard leaves (which do not appear to us to possess any special superiority over others in the English market), and two ingenious "Kip's cartridges"—containing in each a compress, a piece of a much vaunted Kip's ointment plaster for "healing sores," a piece of bandage long enough to serve as a sling, a piece of tape, a small bottle of ammonia, waxed thread, and safety and surgical pins. A piece of lint should have been added to make the ingenious little packet complete.

PATENT POTASH SOAP, FOR USE IN COLD OR LUKEWARM WATER.

(MACKEY, SELLERS, & CO., BOUVERIE-STREET, LONDON.)

THIS soap, like common soft-soap, is freely soluble in cold water. It is, however, solid and quite free from disagreeable odour. The process of washing, as ordinarily practised, is very injurious to woollen and many other fabrics, chiefly on account of the high temperature required. The new soap avoids all this. It may and should be used in cold or lukewarm water, and we can testify to its thorough efficiency. It will be a really valuable addition to the laundry.

COCA.

(CORBYN, STACEY, & CO., 300, HIGH HOLBORN.)

Coca is still upon its trial as a therapeutic agent. To secure leaves of the plant in the best possible condition, Messrs. Corbyn have imported a specially selected supply, in hermetically sealed cases. The leaves are apparently in good condition, and possess all due fragrance, and also the distinct curved lines on their under surface, which are said to be indicative of quality. It is suggested that the conflicting accounts of their action may be in some measure due to the deterioration of some samples in transit or to the leaves not being originally of good quality.

CALAMINA PREPARATA.

Messrs. Corbyn have also brought out an excellent preparation of calamine, very fine in powder, soft, and free from grit. It is said that the natural calamine is better than that which is made artificially.

AROMATIC TETRACHLORIDE OF CARBON.

This new sedative, to which Dr. Prothero Smith called attention in THE LANCET about ten years ago, is prepared in a very agreeable form by Messrs. Corbyn. It has an odour like that of quince, and is said to have been useful in removing the pains of labour and dysmenorrhœa, in hay fever, and in neuralgia.

JOHNSTON'S FLUID BEEF.

(CANADIAN MEAT AND PRODUCE COMPANY, SHERBROOKE, QUEBEC, CANADA, AND HOLYROOD PRESERVED PROVISION WORKS, EDINBURGH.)

The peculiarity of this preparation is, that the ordinary extract is mixed with a portion of the muscular fibre in a state of such fine division that the microscope is required to identify it. It is unnecessary to say that the actual food-value of the beef-tea is very greatly increased by this admixture, and the medical profession have now a fluid meat which is comparable in nutritive power with the solid. The new preparation is excellent in flavour, and we cannot doubt that it will be very extensively used.

CONCENTRATED NON-RESINOUS ESSENCE OF JAMAICA GINGER.

(MR. HAY, 4, REGENT'S-TERRACE, HULL.)

Mr. Hay has forwarded to us a sample of essence of ginger which we find to be singularly free from resin. He prepares it mainly for the manufacture of ginger beer, which is at the present very ill-made. The sweet muddy fluid so familiar to our youth is replaced by Mr. Hay with an excellent effervescing drink, which we think will be sure to find favour with adults as well as children.

New Inventions.

AN ADJUSTABLE LOUNGE.

THE Invalid Patent Bedstead Company has produced a convenient arm-chair lounge, which is capable of being adjusted with ease and celerity for almost any posture which infirmity or inclination may render desirable. It is constructed with due regard to strength, and will be at once a sightly and highly useful adjunct to the furniture of the sick room, while its general utility will make it of value in every household.

SPRING MATTRESS.

THE same Company is now introducing a spring mattress of novel make, securing the distribution of weight over the surface, and attaining a degree of elasticity little inferior to that of the water-bed.

"HYGEIA BOOTS."

MESSRS. THOS. D. MARSHALL & BURTS, of Oxford-street, are making boots on the combined principles of the broad sole and low heel, admirably adapted for the use of ladies who care for health as well as elegance. Breadth of tread at the root of the toes, where the foot should be free to expand, and a full play of the instep, are indispensable conditions of comfort and true mechanical development, with grace of movement. These desiderata the system propounded by Messrs. Marshall and Burts is able to supply.

THE RED CROSS IN THE BALKAN PENINSULA.

SUCH information as is forthcoming regarding the sanitary state of the Russian forces in the Balkan peninsula is chiefly derived incidentally from the reports published from time to time by the Russian Red Cross Society of the proceedings of its agents with the Army of the South (as the army on the Danube and in Turkey in Europe is now commonly designated in Russian journals). An interesting report of the Society on the work which is now being done by the Red Cross south of the Balkans has just been made public in the organ of the Society, the *Messenger of the Red Cross*, and from this report we obtain the following facts.

At Sophia there are 833 patients (of whom 80 are Turks) under charge of the Red Cross, in the temporary military hospital No. 10. This hospital is installed in private houses, but measures are being taken to place 600 of the sick under canvas. The malady chiefly prevalent among the sick here is typhoid of a benign character. Typhus is rarely observed. One of the sisters of charity, Madame Drozdow, attached to this hospital has died from typhoid.

Hospital huts are being rapidly erected at Philippopolis, to meet the demands for increased accommodation for the sick. The Red Cross has now 1200 patients under care in this town, and the deficiencies in linen, bedding, medicines, and medical comforts have been largely remedied by the efforts of the Society. There is, however, still a failure of medical assistance. Of the nineteen medical men appointed for service in the town, seventeen have suffered from illness, six fatally. One of the sisters of charity has also succumbed to sickness, and eight are now lying ill, although with hope of speedy recovery.

At Adrianople the number of sick increases from day to day. A section of hospital No. 69, established in the village of Démerdéschi, is already full of patients, and there is no hope of obtaining good results except by expediting the transport of the sick to Russia. The Red Cross is doing its best to augment in this city the supplies of linen and other necessaries for the sick in the military hospitals. Dr. Ebner, one of the medical staff of the Red Cross, has fallen a victim here to his self-denying efforts; and four sisters of charity are ill.

Hospital No. 57, and the ambulances of the 9th and 14th divisions at Tchataldja, are filled with sick, although the hospital was only recently opened. This hospital, which is partly in houses, partly in huts, and partly in tents, is well provided with linen and bedding; much of this having been supplied by the Red Cross. Five sisters lie ill here.

Hospital No. 52 at Tchovlou is installed in houses and in tents, each tent containing six beds. Here both linen and bedding fail.

Six ships (steamers) are engaged in transporting sick from the Balkan peninsula to the ports of South Russia—two Russian and four English. The Russian ships are fully equipped for the purpose, each ship carrying in permanence a medical and nursing staff. The English ships have appointed to them a medical and nursing staff at the time of their receiving their freight of invalids. The Red Cross furnishes these transport vessels with medical comforts, linen, coverlets &c. for the sick.

The evacuation of the sick is effected as follows. The patients are first sent to hospital No. 74 of San Stefano. There they are classified, and those fit for immediate embarkation are sent to the station of the Red Cross, to wait their turn as the ships come in. The sick deemed to be unfit for embarkation are sent to hospital No. 81, which is installed also at San Stefano. The work of evacuation is carried out under the supervision of a commission, of which the constitution was given in our issue of June 29th. This commission is also engaged in organising a sanitary train for working on the Turkish lines of railway.

A large part of the work of the Red Cross Society has consisted in supplementing the most urgently-needed supplies of the military hospitals in the Balkan peninsula. It is also engaged in ameliorating the lot of the patients in the course of their transport by railway, and to this end it has organised a service for supplying the patients with straw, mats, pillows, bread, wine, spirit, milk, and tea, before the departure of each train. The Society has also undertaken the disinfection of the carriages used by the sick.

At one time the Red Cross stores in the Balkan peninsula had become well-nigh exhausted, but, thanks to the efforts made by the committees in Russia, and the energy displayed in transmitting supplies, the stores now contain an abundance, notwithstanding the large demands which are made upon them, and the generous way in which these demands have been responded to.

JERVIS-STREET HOSPITAL, DUBLIN.—A new and spacious hospital on a site immediately adjoining the old hospital is at present in course of erection, the foundations being already laid. The new structure will have an area of 1500 square yards, and will be capable of accommodating 300 patients. The building fund having been entirely expended in the purchase of the new site and the removal of the old houses by which it was occupied, a sum of £30,000 will be required to complete the new institution.

THE LANCET.

LONDON: SATURDAY, JULY 13, 1878.

THE Government cannot be congratulated on the tone of Lord G. HAMILTON'S answer to Mr. ERRINGTON in regard to the present situation of Medical Bills before Parliament, and the duty of the Government in connexion therewith. The drift of that answer is that the Government will give no undertaking to deal with the question of the Medical Council, which may or may not require to be dealt with at some future time. Lord G. HAMILTON speaks as if he was very uncertain as to the existence of any such necessity, and fails entirely to show that the Government appreciates the deep feeling of the profession on this question. There is no wisdom in such a bearing towards those who ask for a reconstruction of the Council. And there is no excuse for it. For eight years past the all but unanimous demand of the profession for this reform has been a matter of notoriety. The Government could scarcely be in ignorance of it. On the occasion of the first discussion of the Medical Bill in the House of Lords, the Marquis of RIPON reminded the Duke of RICHMOND and GORDON that a similar measure to his had been wrecked in the House of Commons for want of clauses in it securing improvement in the constitution of the Council. In the three months which have elapsed since then the unabated earnestness of the profession has been made more apparent. But the case for dealing with the constitution of the Medical Council has become much stronger of late. The Government Bill abolishes the individual licensing power of the medical authorities. For licensing purposes it consolidates them. In consistency with this it should make changes in the way of reducing the individual representation of the bodies in the Medical Council. It is more than ever necessary that the Council should cease to regard medical education from the point of view of nineteen rival interests. Not only does the Government Bill abolish the individual licensing powers of the authorities, but it creates two new classes or orders of practitioners, whose education and registration are to be regulated by the General Medical Council. This is another reason for having the Council constituted on wider and more representative principles.

But the case of those who demand, as a point of fundamental importance, a reconstruction of the Medical Council does not end here. It has received a great accession of strength from the resolution passed by a large majority of the Medical Council at its recent meeting, to the effect that "the constitution of the Council requires revision." This testimony was not necessary. It is not expected that corporations shall proclaim their own defects and need of change. The absence of such evidence would have little significance as against those who demand change. But the offer of such evidence, the admission on the part of those interested in the retention of the actual, that the actual needs alteration, is an overpowering and conclusive argument for an immediate change, or, at the very least, for an undertaking on the part of the Government that the reforms they have omitted shall be undertaken in the immediate future, as far as that shall be under their control. Under all these circumstances, for Lord G. HAMILTON to give an answer that offers no satisfaction to those demanding this change, is in the highest degree disappointing and unsatisfactory. Such treatment contrasts with that wise concession to strong and reasonable representations which has characterised the Duke of RICHMOND in his bearing to those who on various sides have had to fight this battle. This is not a political question, and the Medical Bill cannot be fought for as if it were a political measure. True, it is a very important measure, and, if made more complete, would be creditable to the Government. But it must be fought on other than political principles. Men on opposite sides of the House will agree that the medical education of future generations is to be decided on other than political considerations. Under all the circumstances, we adhere strongly to our advice of last week—that the Government Bill should be opposed unless a change in the Council is granted or promised, and that, failing this, the right course is to ask for a Select Committee. Let our readers suppose what would happen if the present Bill becomes law without any undertaking from the Government to complete the legislation. They will say, and doubtless a large part of the two Houses will agree with them—"Thank Heaven, we have done with medical legislation and the nineteen medical examining bodies. We have put them all into one cage, and they must now pose as best they can as a happy family. We shall have no more to do with it. Doctors and dentists and midwives must get the best education and the best consideration they can out of a Body that has never been able to bring medical education up to the point necessary for passing the very modest existing examinations." Even without distinctly resolving to consider the questions in medical reform closed, we know how natural it will be for the Government next year to say that they have done so little in the way of domestic legislation during the last session or two, and in that little Medical Bills figured so largely, that they cannot undertake the subject even of the representation of the Medical Council.

Under all these circumstances, earnest medical men who want to see medical education reach a higher level than it has yet attained ought to use all their influence with members in the House of Commons to make it clear that Lord GEORGE HAMILTON'S position is untenable. The hope of the future is in an efficient Medical Council, and no great Medical Bill should be allowed to pass which does not provide such a Council.

THERE would, at first sight, seem to be little room for doubt as to the nature of a death certificate, or the person by whom it must be given. The document is required to certify the "cause of death," and it can only be lawfully and reasonably signed by a duly qualified medical practitioner, who personally attended the deceased. So much the statute plainly enjoins; and, regarded from the standpoint of law, the conditions are fulfilled if it be thus duly attested by a competent witness that the person to whose death the return relates died from a "natural" cause. The Crown, acting as the custodian of the lives of the people, dispenses with an

inquest in cases where the certificate of a recognised medical practitioner is forthcoming to affirm that neither immediately nor remotely was the death occasioned by violence or injury. Beyond that fact the Crown is not concerned, and until within comparatively recent times the certificate contemplated no other purpose. There is, however, another department of the State which has a great and growing interest in the certificate returned; and it is worth while now and again to set out the reasons why this interest should be especially considered.

It is necessary to be frank in dealing with this matter, and candour compels us to confess that the claims of the Registrar-General's office are not either very constantly or, perhaps, adequately recognised. This is in part due to the manner in which the statistical use made of medical certificates has been grafted upon their original purpose, which related exclusively to the requirements of justice. Of course it was within the competence of the State to apply the returns collected to any purpose conducive to the general good; meanwhile it cannot be disguised that, in so far as the new use was not contemplated by the persons filling up the forms, their value in regard to it may have been small. For example, it is not only conceivable, but the fact, that less than twenty-five years ago it was not the habit of practitioners to tax their power of diagnosis severely for the purpose of a certificate. Such terms as "congenital debility," "atrophy," "chronic bronchitis," "senile catarrh," "phthisis," "heart disease," "dropsy," were not employed as precise definitions, but intended generally to affirm that "the cause of death" was *natural*. The practitioner did not feel bound to make a medical diagnosis; he was not dealing with a medical authority, and contented himself with a method of discharging his public duty for the information of lay officials, which, though strictly accurate in every legal sense, was not either intended or adapted for the use of experts engaged in compiling a national medical register. It follows that the majority of death-certificates given throughout the country some twenty years ago were not designed for medical purposes, or well suited for the use made of them; and, with the fullest appreciation of the progress which has been achieved, and the advantages, general and professional, accruing from the publication of the weekly and quarterly analyses and digests prepared at Somerset House, we must still take leave to doubt whether the system of making these returns stands on a satisfactory footing. The very high respect in which the chief of the medical department, Dr. FARR, is held by the profession throughout the country, both for his personal worth and his work's sake, has done much to develop the character of the reports made to his office. It is no mere platitude to say that the department owes its success, so far as the great body of medical practitioners is concerned, to the confidence reposed in Dr. FARR, and the high esteem in which he has been justly held. The return of death certificates, no mean service, has been wholly unacknowledged, and nothing so much as the fair and able use made of them in the medical department of the Registrar-General's Office has hitherto restrained the rising feeling of discontent with which the whole question of gratuitous certificates—a matter which has yet to be adjusted—is regarded. Nevertheless, we repeat, the mass of death certificates does not, in our judgment, afford a secure basis for analytical inference as to the "causes of death" at work among the population.

We doubt whether the many difficulties and embarrassing circumstances which attend the certifying of the cause of a death are appreciated. Take, for instance, the surface fact that there must needs be some change of opinion in the course of watching a case, and it is scarcely to be expected that the "assigned cause" should contradict a previous diagnosis, except some complete revolution of opinion has been effected. The return made in an instance of this class will obviously be a compromise, possibly wide enough to cover the divergence between a diagnosis of aneurism and death from pulmonary phthisis with large excavations! This would of course be avoided if the returns made for medical State purposes were addressed direct to Somerset House instead of passing through the hands of friends and the local registrar. In any reform which may hereafter be effected in the working of this important department, it might be worth while to consider whether, while satisfying the requirements of public safety in the district, the returns for medico-statistical purposes might not be received directly and in some suitable way acknowledged, at the central office. If, as the Legislature must at length be convinced, these returns are of considerable public value, they should surely form the subject of a special arrangement. At present the medical use made of them is entirely supplementary, and, so to say, without leave. Then, again, it must be manifest that if certificates of the causes of death are to form the basis of a National Register of Disease, they should be prepared with more accuracy than can be obtained without special training. The medical director of the department should, in concert with the leading teachers and examiners in pathology, devise a system of reporting which would secure uniformity of classification, and, by avoiding secondary points of difference in diagnosis, ensure accuracy on the broad lines. It is the fashion of the day to neglect—almost to ignore—systems of nosology, but such a system, traced with few, and the clearest of, outlines, is indispensable to the development of a system of returns upon which general information for the guidance of the profession and the public, so far as preventive measures are concerned, is to be based. We fully recognise the vast good that has been accomplished by the labours of the medical and statistical department of the Registrar-General's office, but it cannot be doubted that a further development in concert with the profession is necessary, and the time has arrived when the need may be described as of considerable urgency.

To have seen a provincial surgeon and two honorary Fellows who are not, and never have been, identified with any medical school, elected members of the Council of the Royal College of Surgeons, must have sorely perplexed those who had imagined that the suffrages of the large metropolitan schools can at any time turn an election at the College. Guy's, St. Bartholomew's, St. George's, and University College, as well as Westminster, each sent one candidate, and King's College two candidates, but in every instance they had to yield to gentlemen outside the charmed circle. Those who like to discover a reason for everything will not, perhaps, have any difficulty in adducing more or less satisfactory explanations of this, and in suggesting

effectual precautions against the occurrence of a similar contingency in future. But, explain it as we may, the schools have been defeated, and victory has for once fallen to that section of Fellows, whether provincial or metropolitan, who had combined to make Mr. LUND'S election safe and sure. The significance of this triumph becomes all the greater when we remember that the votes polled by Mr. LUND decided the rest of the election. The following analysis will make this clear. Out of a total of 300 votes, Mr. LUND received no less than 101, of which 24 were plumpers. And as plumping for one candidate practically takes away a corresponding number of votes from any two other candidates, it can easily be understood that an equable distribution of Mr. LUND'S plumpers might have made the result of the election altogether different. Mr. LUND might still have been elected, but his successful colleagues would not, in all probability, have been the same. Mr. WOOD, for instance, had only 14 and 11 votes less than Mr. WILSON and Mr. GAY respectively, and was only 20 behind Mr. LUND himself. Mr. POWER had only 17 and 14 votes less than Mr. WILSON and Mr. GAY, and Mr. LISTER 19 and 16. If, therefore, those who plumped for Mr. LUND had voted, as they ought, for three candidates, instead of one, one or more of these three gentlemen we have just named might have been elected members of the Council. With the possible exception of Mr. BRYANT, the changes would, however, have ended here, the other candidates, Sir HENRY THOMPSON, Mr. LEE, and Mr. HOLT, being too far behind to have been substantially benefited by any change.

Apart from these speculations, more or less vague, as to what might have occurred under circumstances different from those that did exist, and without cavilling at the actual result, there is room enough to question the wisdom and perspicacity of those who passed by such distinguished surgeons and teachers as Mr. LISTER and Mr. BRYANT, to say nothing of Mr. WOOD and Mr. POWER, both of whom are men of conspicuous ability, and in every way specially qualified to take part in the deliberations of the Council on all matters relating to medical education. Had Mr. WOOD and Mr. POWER not been examiners in Anatomy, there can be little doubt that at least one, and perhaps both, would have been elected.

One useful lesson may be learned from the election last week. The Fellows in London have had endless admonitions of the truth of the old adage "Union is strength." They may be reminded that by union the provincial Fellows carried their candidate at the head of the poll; by union, too, the supporters of Mr. WILSON and of Mr. GAY gained their strength, and unless they close their eyes to the evidence of facts, they may see that by disunion, dissensions, and jealousies, they have frittered away the enormous power and influence of the large London schools.

THE Public Health (Ireland) Bill, now in Committee of the House of Lords, has undergone several important modifications during its progress in Parliament this session, the third in which it has been introduced in succession. The Bill, drafted on the lines of the Public Health Act (England), 1875, as originally prepared, failed to provide for several defects of sanitary organisation and administration in Ireland, especially with reference to the medical aspects of that organisation and administration. No provision was made, for example, for the proper remuneration of the dispensary medical officers for the performance of special duties, such as visiting the sick on ship-board, certifying the causes of death from contagious diseases, and attending in Court as professional witnesses; the wholly inadequate scale of remuneration which had been adopted for the payment of the dispensary medical officer for duties imposed upon him under the Public Health Act (Ireland), 1874, was unrectified; the vague and inaccurate title of "sanitary officer" for the medical officer engaged in doing public health duties was retained; and, finally, no system of central supervision of sanitary authorities analogous to that which existed in England had been provided for Ireland. In the Bill, as amended in the House of Commons, and as it now stands before the House of Lords, several of these objections have been removed. For example, it provides for special remuneration of the sanitary medical officer for services rendered in courts of law and on ship-board, and concedes to him the title of medical officer of health. But no provision is made for a system of independent central supervision, and this the Irish Medical Association, representing the profession in Ireland, holds to be essential to the proper working of the sanitary law in Ireland. This opinion is confirmed by the recent report of the Commission on Local Government and Taxation of Towns (Ireland), and by the sufficient experience of the working of the Public Health Act (Ireland), 1874.

There would appear to be some doubt whether this important question is one to be dealt with in the Bill now under consideration, or whether it is not within the competence of the Local Government Board (Ireland) under its present powers, the Treasury assenting. However this may be, it is of importance that the question should be fully considered in the present stage of the Bill, in order that legislation may be effected upon it, if further legislation be required; and if not, in order that the Local Government Board (Ireland) and the Treasury may be induced to take some prompt action with regard to it.

It is requisite, however, in urging this question that the parallel should not be too closely drawn between the requirements of England and Ireland as to an independent supervision of sanitary authorities in the performance of their public-health duties. We have no doubt that a scheme of sanitary organisation such as that provided for England and Ireland under their respective Public Health Acts must of necessity fail largely if provision be not made for the proper initiation and subsequent supervision of the sanitary organisation by the central administration. If this be not done there can be no certainty that the designs of the Legislature will be carried into effect, or that there will be any co-ordination of the work to be accomplished by the numerous authorities in different parts of the kingdom, and the frustration of the law is rendered almost inevitable. But it does not follow that, the agencies for an independent central supervision being provided, the results contemplated from that supervision shall be obtained. The Public Health Bill (Ireland) has virtually been frustrated by reason of the want of such supervision; the Public Health Act (England) has been largely frustrated by reason of having this supervision. The paradox is

apparent only. In England the central administration of the Public Health Act has been subordinated so largely to the requirements of Poor Law administration, the same inspectors being required to supervise the workings of both sorts of law, that the supervision of the local sanitary administration has been and is largely a mischievous sham. The Public Health Act (Ireland) will need for its proper working a system of independent sanitary supervision such as the Irish Medical Association urges, but that supervision should be founded on the ascertained necessities of the case, and not copied from the utterly fallacious example of the central administration of the English Public Health Act.

BEFORE the Committee now sitting at the War Office to inquire into the causes which prevent candidates coming forward for the Medical Department of the Army makes its report, we desire to bring prominently to its notice the last act of injustice done to the Department by the authorities. On the 1st of April a Royal Warrant was published, regulating the forage allowance to the officers of the army. By it forage is granted unconditionally, save that horses must be actually kept, to officers of all departments having the rank of field officers, except the Army Medical Department, the Chaplains' Department, and also inspectors of warlike stores, and these "will be allowed forage for such number of horses as may be necessary for the efficient performance of their public duties." A more retrograde step, and one more likely to damage the public service, was never taken, and we emphatically warn the Secretary of State that so long as this regulation remains in force he will get no good candidates to come forward, nor anything approaching the number he may require even of the lowest-qualified class of medical students. We have repeatedly called attention to the conduct of Lord CARDWELL in over-riding a Royal Warrant by a War-office Circular, but his cheeseparing economy was applied to all departments. In the present instance, although the illegality which we always believed attached to Lord CARDWELL'S measure is wanting, there is such a manifest injustice and slight cast upon the Medical Department that we cannot find words to express our astonishment at the course adopted by the authorities. If relative rank in the army is to be of any use at all, it must carry with it all the advantages pertaining to the substantive rank except military command, and among these advantages stand prominently the allowances, including forage. We cannot understand on what principle this has been withdrawn from medical officers. The new regulation, moreover, involves gross injustice in its conditional grant of forage. A medical officer is expected to find a horse when necessary for the efficient performance of his duties. He may no sooner have provided himself with one than he may be removed to a station where the necessity does not exist, and he must then either sell his horse for what he can get or keep it at his own expense. We believe the most economical course the War Office could adopt would be to cancel the clause of the Warrant in question; but if it does not, it ought, in justice, to find and keep a horse for the medical officer when necessary for his duties; this, however, would not remove the slight which the Department feels has been cast upon it by the new regulation, and which, we have no doubt, unless removed, the profession at large will resent. We look with anxiety for the Report of the Committee, and the decision thereon of the Secretary of State, but we warn them that unless justice is to be done in this matter to the medical officers, they may save themselves the trouble of reporting, so far at least as any likelihood of an increase of candidates for the Department is concerned.

Annotations.

"Ne quid nimis."

REGISTRATION OF FOREIGN AND COLONIAL DEGREES.

A CORRESPONDENT describes as "liberality with a vengeance" the action of the Council in recommending or accepting a clause in the new Medical Bill which will enable the holders of approved foreign and colonial degrees to be registered on application without any further examination. This is rather a bold way of describing what the Council has really done. It has introduced alterations into the clauses of the Bill which tend to make them a little more stringent. They require of the holder of a colonial diploma or degree that he shall have been *bonâ fide* domiciled in a British possession, and that he is of good character. Before the diploma or degree can be recognised by the Council, the Council must be satisfied that it entitles the holder to practise medicine, surgery, and midwifery in the country or possession from which it was obtained, and that it furnishes sufficient guarantees of the possession of the requisite knowledge or skill. Again, if a person not a British subject, or who, if a British subject, has practised medicine and surgery for more than ten years elsewhere than in the United Kingdom or a British possession, shows that he has obtained a medical diploma or degree granted in a foreign country, which enables him to practise in the foreign country and guarantees efficiency, and that he is of good character, he will be entitled to be registered without examination in the United Kingdom. No doubt very serious responsibility will rest upon the Medical Council to ascertain the value and significance of the colonial and foreign degrees that they will be asked to recognise. But this question is pressed upon us from without. Our own practitioners are threatened with exclusion from France unless they submit to French examinations. The Council very properly deprecates that kind of legislation as inadmissible between England and France, and suggests, as we have already done, that Her Majesty's Government should bring under the notice of the Government of the French Republic the legislation which this country proposes in this international matter. We certainly cannot refuse to recognise good diplomas from our own colonies, and we think the time has fully come for recognising good foreign diplomas in a spirit of scientific and international generosity.

THE CASE OF SINGLE LUNACY PATIENTS.

IT is impossible not to feel compassion for, if not some sympathy with, medical men who unwittingly commit the error of receiving lunatics into their houses as "single patients" without taking the steps necessary to procure a licence, which, in other words, means reporting the case to the Commissioners, and so placing the patient under public protection. It was stated in evidence before the Select Committee on Lunacy Law that abuses are incomparably more likely to occur in the treatment of single patients than of those in asylums, whether public or private. To this opinion we must adhere, and it is a simple matter of duty to recognise the wisdom of the course

taken by the Commissioners in Lunacy with respect to the recent case at Datchet. We offer no opinion as to the degree of culpability which may have attached to the defendant in this instance. The law cannot admit the plea of ignorance as an excuse, and the moment when the Commissioners are judiciously bestowing more than accustomed attention on the case of "single patients" would have been most inopportune for the exercise of forbearance which might encourage abuses. Medical practitioners should clearly understand that the "charge of a single patient" is not a fitting recourse by which to eke out deficiency of income. Apart from the fact that the patient placed with practitioners who are not experts in the treatment of insanity must lose his legitimate chances of cure, there is the obvious disadvantage that without proper attendants and appliances the care of single patients is almost sure to be either inefficient or inhumane. The introduction of a single eccentric person into a household will severely tax the temper and watchfulness of its members, but the presence of a lunatic overturns or disarranges every condition of comfort and security, with the inevitable result of inflicting serious inconveniences on the unhappy subject and cause of the disturbance. We do not think the law can be too rigidly enforced in these cases, or that the Commissioners or Chancellor's Visitors can be too exacting in their requirements. It would be well if something could be done to bring help to the deplorable class of "nervous" patients who are not certified lunatics, but who, nevertheless, stand in sore need of protection. While we express this strong opinion of the needs of the case, let us repeat that it is impossible to avoid a feeling of regretful sympathy for the offender. To this we would add the hope that if there should be found to be ground for the exercise of leniency in the present instance, the considerable, though not too heavy, fine of £100 may be reduced or remitted. This suggestion is not either inspired or made with any lack of recognition of the exceeding gravity of the offence for which a conviction has been obtained.

THE METROPOLITAN SMALL-POX EPIDEMICS OF 1871-2 AND 1876-7-8.

IN a paper recently read before the Epidemiological Society, Dr. McCombie drew some inferences from the statistics of the Metropolitan Asylum Board Small-pox Hospitals, which, if trustworthy, would be somewhat discouraging to the believer in the efficacy of vaccination. Faith in vaccination is so dependent upon statistics that it becomes important that the true bearing of all vaccination and small-pox statistics should be carefully and impartially weighed. Dr. McCombie is careful to state in the opening of his paper, of which we published an abstract last week, that the statistics it contained were "exclusively those furnished by the reports of the medical superintendents of the hospitals of the Asylum Board," but this fact appears afterwards to be lost sight of when he bases conclusions as to the general epidemic on the limited statistics of these hospitals. We may instance two of the conclusions or assertions of Dr. McCombie, to which we especially demur, as likely to be mischievous, because they appear to us untrustworthy. "With regard to protection afforded by good and bad marks under ten years, it is found that those who are badly vaccinated run no more risk of contracting small-pox than those well vaccinated, although the mortality is greater in those with bad marks." With regard to this statement of Dr. McCombie, we can only say that while we doubt the existence of any statistics upon which such an assertion can be safely made, we are sure that it is impossible to arrive logically at such a conclusion from the statistics of any number of cases treated in hospital. Those who believe in the protection afforded by true vaccination, and in the intimate relation between the number and quality of vaccination marks and the rate of mortality in cases of small-pox after vaccination, will find it hard to believe Dr. McCombie's theory that good vaccination does not afford a better protection from small-pox than does bad vaccination, unless the basis of the theory be more satisfactorily explained. The second of Dr. McCombie's assertions from which we are anxious to express our dissent is, "that in the present epidemic a much larger proportion of vaccinated and unvaccinated, 7 per cent. and 11 per cent. respectively, are attacked with small-pox under fifteen than in 1871." So far as this statement signifies that in the Asylum Board hospitals the recent proportion of cases under treatment below that age is larger than was the proportion during the last epidemic, it may be true, and may be due to a variety of causes which are interesting and important. The far wider assertion of Dr. McCombie as to the number attacked is, however, unwarranted, and if true would supply an argument against vaccination. The following facts relating to the mortality from small-pox in London during the two epidemics, derived from the Registrar-General's Reports, afford to us conclusive proof that the proportion of children among those attacked with small-pox continues to decrease, as it has declined since infant vaccination became more general. In 1871-2, of the 9698 fatal cases of small-pox in London, 37 per cent. were of children under five years of age, 28 per cent. of persons aged between five and twenty years, and 35 per cent. of persons aged upwards of twenty years; of the 4310 fatal cases during the present epidemic, 28 per cent. have been of children under five years of age, 28 per cent. of persons aged between five and twenty years, and 44 per cent. of persons aged upwards of twenty years. The proportion occurring among persons aged between five and twenty years was the same in both epidemics; but the proportion under five years had declined a quarter, while that of adults had increased to a like extent. There is no reason to doubt that, with the increase of vaccination since 1871, the proportion of children attacked with small-pox during the present epidemic has declined fully as much as the proportion of children that have died from small-pox. We have no reason to doubt that Dr. McCombie's figures are accurate, but they certainly do not support the deductions he has drawn from them—deductions which are directly opposed to established statistics on the subject, and too improbable to be deemed trustworthy unless supported by other evidence than that on which his paper was based.

GLYCOGEN.

SOME interesting observations on the chemistry and physiology of glycogen are contributed to the *Wiener Med. Jahrbuch* by Dr. Abeles. In order to ascertain the amount of glycogen in muscle, it is necessary to digest it with caustic potash and separate the albuminous bodies by means of a large quantity of a solution of iodide of potassium and mercury. Abeles proposes to separate them, instead, by chloride of zinc, the solution having previously been rendered almost neutral by hydrochloric acid. If it be boiled for from twenty to thirty minutes with the zinc, the albumen is precipitated in a dense mass, and the solution is readily filtered. The glycogen may then be precipitated by alcohol. No formation of sugar from the glycogen occurs during the boiling with chloride of zinc.

Glycogen can also be precipitated, it is found, by baryta. If a saturated solution of baryta be added to a solution of glycogen, an abundant white precipitate is formed, which sinks to the bottom of the vessel on standing. When collected and dried in vacuô at a temperature of 212° F., it was found to have the following composition—$C_{18}H_{30}O_{16}Ba$. The same precipitate occurred when baryta-water was added to a liver decoction, and from it the glycogen could be

liberated by dilute sulphuric acid; but this method is found to be not very convenient, because the barytic sulphate separates from the solution of glycogen slowly and with difficulty.

It is well known that curara produces glycosuria, but the mechanism of the production of the sugar is a point which has been much discussed and is still uncertain. Bernard thought that it was by the influence of the poison on the nerves of the liver. Abeles has found that the sugar in the blood of a dog which had fasted for five days was ·046 per cent., and that an hour after poisoning with curara it had risen to ·13 per cent. He believed that so considerable an increase in the amount of sugar in the blood could not possibly arise from a transformation of the glycogen which remained in the liver after five days' fasting. He accordingly investigated the amount of glycogen in the muscles before and after poisoning by curara. The animal having been narcotised, a piece of muscle was excised from one leg; curara was injected, artificial respiration maintained for (in different cases) from twenty-five minutes to an hour and three-quarters, and then a similar piece of muscle removed from the other leg. In all cases the amount of glycogen in the muscle after the curara was larger than before the injection; the anticipated diminution in the glycogen could not in any case be found. The experiments thus appear to support Bernard. They show, at any rate, that the sugar which passes into the blood is not derived from the glycogen of muscle.

Glycogen, in large quantities, appears to be an active blood-poison. Böhm and Hoffmann have injected it into the jugular vein of cats, and found that after the injection of from three to ten grammes, the urine contained hæmatin. Hence it appears that glycogen is one of those substances which can dissolve the blood-corpuscles. The urine contained albumen, and, when this was separated, rotated polarised light to the right, and reduced oxide of copper, but the reduction was far less than corresponded to the amount of action on polarised light. This dextro-rotatory substance could be separated by the addition of six or eight volumes of alcohol, and it was then found to be soluble in water without opalescence, to give no colour with iodine, to have no power of reducing Fehling's solution, but to be transformed into grape sugar by sufficient boiling with acids. The average rotating power on light was found to be 194·3°, a lower power than glycogen, which was determined, on an average of seven observations, to be 226·7°. Hence the substance corresponds to the achroodextrin of Brücke.

SEASIDE SANITARY WORK IN SUSSEX.

WE have frequently taken occasion to comment upon the sanitary condition of those portions of Sussex united for administrative purposes into one district under the able and skilled supervision of Dr. Charles Kelly, medical officer of health, assisted, we hope, by a large staff of inspectors. We are encouraged in this, as in other cases, not only to hope, but to believe that the staff is large (if not sufficient), not only because the statistical returns seem to be unusually full and complete, but because, in urban as well as in rural districts, health authorities are disposed to deal more liberally in the matter of number as well as remuneration with the inspectors than with the medical officers of health. This by the way. Dr. Kelly, on his accession to office, chose a style of his own in compiling reports, which, as we think, cannot fail to commend itself favourably to each and all the several authorities who have been fortunate enough to secure his professional services. In brief, each district is presented with a distinct return, so that, "if so disposed," no committee need be troubled with so much as a glance at—or, so to speak, a sniff of—the nuisances, smells &c., that appertain to his neighbours (we mean, of course, on paper). And for the information of those whose *special* senses, as well as sympathies, take a wider range, there is a concise chapter of some fourteen pages, the contents of which "contrast favourably with the rates of previous years, the death-rate of this West Sussex combination having been 14·5 in 1877, as compared with 17·0 per 1000 in 1875." The medical officer, in reminding his readers that the south-eastern division of England has always a lower mortality than the other divisions in the kingdom, is able to report at the same time that "in West Sussex the rate is less than in other parts of the south-eastern counties, and that there has been a progressive decline in the mortality for many years." These figures have a special interest for many of the middle classes who take an annual outing at the seaside, as Dr. Kelly's combination includes several important watering-places. He says: "An important test of the healthiness of a district is to be found by examining the infant mortality. In this combined district the year 1877 was as favourable to infant as to adult life." This is very satisfactory as regards West Sussex, and those who wander about its fringe of salt water, for "whenever a large number of infants die there is always to be found some insanitary condition which requires investigating." We congratulate Dr. Kelly that, during the past year, no investigation of the kind indicated has been required in his combination. The report before us, as well as its predecessors, may be usefully studied by fathers of families who perennially want to know where to take their children for the month's excursion, so that the autumn trip may not, instead of doing good, do an indefinite amount of mischief. In how many instances is not the latter the case?

URBAN MORTALITY FROM INFANTILE SUMMER DIARRHŒA.

THE season for diarrhœa fatality in urban populations has again come round, and it will not be unseasonable to urge the medical officers of health of large urban sanitary districts to be prepared to afford their assistance to the further elucidation of the causes which control this annual epidemic. The careful observations of Mr. George Turner, the medical officer of health of Portsmouth, have prepared the way for much useful work in this direction, which, it may be hoped, will not be lost sight of during the next few months. In his last annual report upon the sanitary condition of Portsmouth, Mr. Turner makes a further valuable contribution to this branch of sanitary literature, based upon the statistics of infantile diarrhœa mortality in sixteen large English towns during the ten years 1867–76. As the result of these comparisons he concludes that "Given a certain percentage of infants in a town, who receive other nourishment than breast-milk, the annual state of the town being the same, the mortality from diarrhœa will be entirely ruled by meteorological conditions." The word "meteorological" is used because it is evident that the influence of variations of temperature is immensely modified by rainfall. It is pointed out that a continued minimum temperature exceeding 50° F. is necessary to produce epidemic diarrhœa. It is, therefore, more important to record observations of the minimum than of the maximum readings of the thermometer as governing diarrhœa fatality. In another part of his report Mr. Turner observes:—"It is not so much the effect of temperature on the infant itself which influences the mortality, indeed it is rarely fatal to the child nourished on human milk, but it is the influence of temperature on the child's food which determines in the highest degree the number of deaths." There was an attempt a year or two since, with reference to the exceptional fatality from diarrhœa in Leicester, to prove that hand-feeding of infants had little or no effect upon diarrhœa fatality. It is needless to say that the proof offered was essentially inconclusive.

Epidemic summer diarrhœa is comparatively a modern disease, and we know that it is much more fatal among English than among Scotch infants. There can be but little doubt that hand-feeding of infants has also become far more general in recent years, and statistics of its varying proportions in different towns could not fail to throw invaluable light upon the causes of the wide variations in diarrhœa fatality in different towns.

HYDROPHOBIA.

TWO more startling cases of hydrophobia have lately been reported in the daily papers. One of them occurred at Acton, and the origin of the disease appears to have been somewhat uncertain, since the lad, a potboy, had been bitten by at least two dogs, each of which remained well, and a dog was fond of licking deceased's face and mouth. The disease ran a very rapid course. From the evidence at the inquest, given by Mr. Crowther, of Acton, the symptoms, when the lad was first seen, were hysterical, accompanied with pain in the arm and convulsions. In the evening there was pain in the throat and convulsion on an attempt to swallow. At midnight the convulsions were more violent, and there were attempts at vomiting, and a quantity of frothy fluid spat out. The next morning the lad was dead. The post-mortem examination gave the usual negative result, the only naked-eye change being congestion. The case, from the rapidity of its course, is very remarkable.

The other case occurred in Paris, where it created a great sensation from the public position of the victim. The bite was a slight one, upon the nose, and untreated, the dog not being suspected. But it had bitten other dogs, and died three days later with what was termed by a veterinary surgeon "internal inflammation."

THE CURE OF HABITUAL DRUNKENNESS.

THE Habitual Drunkards Bill is likely to become law, and it will be necessary to educate the magistracy up to the point of being able to use it wisely. We cannot abate one tittle of our strongly-expressed objection to the multiplication of *private* houses of restraint for persons who are held to be incapable of exercising self-control. The only safe principle upon which to legislate we conceive to be that the State should reserve to itself exclusively the right and power of imprisoning. It does not practically affect the question at issue whether the incarceration be voluntary or imposed. The fact that restraint is to be exercised presupposes resistance, and the subject should not be asked or obliged to surrender his personal right to any authority which is not public, and officially responsible. This principle applies with primary force to the case of lunatics, and it is equally, if not even more, important in relation to the imprisonment of habitual drunkards. Dr. Bucknill, in a letter to *The Times*, adheres to his expressed judgment on the working of inebriate asylums in the United States, which, on the whole, he has pronounced to be a practical failure. The reports which have reached us certainly support that conclusion. Meanwhile, we do not altogether understand one objection urged by Dr. Bucknill to the proposed measure—namely, that it will deal diversely with the rich and the poor. As we understand the scheme before Parliament, there will be provision for the habitual drunkards of all classes. The main objection we see to the general proposal is the opening it will offer for cruel abuses and "misadventures." Nothing is easier than to foster a habit of excess in drink, and if the proof of such a habit is to be the sole passport to an asylum, the facility offered for disposing of inconvenient or obstructive persons must be apparent. The huge peril to society this facility will create will be augmented by the fact that the restraint to be applied will be in the hands of interested persons who will derive a profit from the retention of patients under their care and confined within their establishments. Asylums for inebriates should be directly under State control and the most rigorous supervision. This protection should be incorporated in the measure to render it safe and practical.

EPIDEMIC SCARLET FEVER IN SHEFFIELD.

JUST at the time that the Sheffield Town Council, in the exercise of its responsibility as the urban sanitary authority of the borough, is deliberately proposing to take the retrograde step of electing a medical officer of health who may be engaged in private practice, a remarkably fatal epidemic of scarlet fever is calling into prominence the fact that more and not less energy should be infused into the sanitary organisation of the town. Since the beginning of this year no less than 435 deaths from scarlet fever have been registered within the borough, equal to an annual rate of 2·9 per 1000 of the population. The fatal incidence of scarlet fever upon Sheffield in recent years has been exceptionally severe, and resulted in 2870 deaths during the eight years 1870–7. Thus during those eight years the average annual death-rate from scarlet fever in Sheffield was equal to 1·4 per 1000, and was double the rate from the same disease in London during the same period; the scarlet fever death-rate in the same eight years averaged 1·2 per 1000 both in Leeds and Bradford. The exact relation between sanitary condition and the rate of mortality from such a disease as scarlet fever has yet to be ascertained, but few now venture to deny the relation. The general health of Sheffield has improved in recent years, as Dr. Griffiths has so conclusively shown in his annual reports, but he has as conclusively shown that Sheffield has unusually "unhealthy areas," even for a manufacturing town, which the Town Council still ignore; and he has again and again pointed out that Sheffield is one of the few large towns in which the urban sanitary authority has neglected to provide any hospital accommodation for the isolation and treatment of infectious diseases.

THE HUNTERIAN MUSEUM.

FROM the annual report of Professor Flower, the Conservator of the Museum (which is about to be submitted to the Council), it appears that the number of visitors to it, which in 1868 amounted to 4224, rose last year to 8151. Amongst them were the Prince and Princess of Wales, the Crown Prince of Austria, the Prince Waldemar of Denmark, the Chinese Minister, &c. The additions to the different departments of the museum have been fully up to the average. Amongst them are a great number of Dr. Peacock's valuable preparations. The Prince of Wales continues to evince the interest he takes in the College by sending donations of three skulls of the Indian rhinoceros, which were presented to his Royal Highness, during his tour in India, by the late Sir Jung Bahadoor, of Nepal; the skeleton of a sloth bear, and the skull of another. Dr. Junker has presented some interesting Japanese obstetrical instruments and illustrated works on the subject, in Japanese, to the library. Sir Victor Brooks, Bart., the Zoological Society, and the Westminster Aquarium are also valuable contributors. In the Physiological series the preparations made by Mr. William Pearson, one of the assistants, are especiallly deserving of notice, their instructive value being much increased by the addition of a printed label affixed to each muscle, bearing its name.

In response to an invitation from the commissioners of the Exposition Internationale des Sciences Anthropologiques, now being held in Paris in connexion with the Universal Exhibition, the Council authorised Professor Flower to select specimens from the museum, which, by their presence in Paris, might further the objects for which the Exhibition

is brought together. As the osseous remains of the extinct race of Tasmanians are naturally of great interest to anthropologists, and as they are rare in Continental museums, the series (the most complete in existence), consisting of two skeletons and thirteen crania, seemed appropriate for the purpose. These, and eighteen other skulls of kindred races, chiefly from the Melanesian islands, were accordingly forwarded, together with specimens of the diagrams used in illustration of Professor Flower's last course of lectures, and photographs of the interior of the museum, so that the College is well represented at the Exhibition.

By the terms of the Hunterian Trust the museum was to be opened to certain privileged persons only for eight hours each week. It is now open, to almost everyone who applies for admission, for twenty-four hours in summer and twenty hours in winter during the week; Friday and Saturday mornings being reserved for students of special departments, artists, ladies, &c. On Saturday afternoons visits are not unfrequently made by various bodies of working men, or science classes, and always under the personal supervision of Professor Flower, who frequently treats his discriminating audience to one of his pleasing explanatory lectures of some portions of the contents of the museum.

ON THE RELATIVE SIZE OF THE TRACHEA AND BRONCHIA.

M. MARC SÉE gives the following results of his experiments, in a paper read before the Académie de Médecine:—

(1) The mean diameter of the trachea is generally larger in the male than in the female of the same age. It increases with age. It was 3½ millimetres in a fœtus of seven months and a half. At birth it varies from 4 mm. to 5·6 mm. At the age of two years it is 7·5 mm. and even 8 mm. From four to seven years the diameters are from 8 mm. to 10·5 mm. Below the age of twenty the numbers vary between 16 mm. and 22·5 mm. in the male, in females between 13 mm. and 16 mm. The average in twenty-one adult male subjects was 18 mm., in twelve adult female subjects 14·5 mm.

(2) The mean diameter of the right bronchia in subjects under twenty years of age varies between 11·75 mm. and 17·5 mm. The average of eighteen male subjects was 14 mm., that of twelve females 12 mm.

(3) The mean diameter of the left bronchia varies in subjects over twenty years between 7 mm. and 13·5 mm. The average of eighteen male subjects was 11·6 mm., that of twelve female subjects 9 mm.

(4) The cube of the diameter of the trachea, as compared with the united cubes of the diameters of the bronchi, gave similar numbers in twenty-five cases. These cases comprehend: (*a*) Subjects to the number of thirteen, of either sex, above twenty years of age (with the exception of one boy aged four, who died of croup), in all of whom the size of the trachea surpassed greatly the average size of the two bronchia, 72·25 mm., against 52·60 mm. In almost all these subjects the pulse was healthy. A boy of five died of tubercular pneumonia, two others of the same age of croup. (*b*) Twelve subjects above twenty years, of whom eight had healthy lungs, and amongst the latter was an old man of eighty-six. The remaining four were—a man of twenty-one, and a woman of thirty years of age, both deceased from tubercular phthisis; a man thirty-two, affected with suppurating pneumonia; and another of forty-five,—in all of whom there was dilatation of the bronchia. The same uniformity showed itself in dogs, and in a sheep examined by M. Sée for this purpose.

(5) The size of the trachea was smaller than that of the two bronchia in eight subjects, of whom five had a very extensive tuberculisation of the lungs; whilst the other three, a man sixty-two, another sixty-eight, and a woman twenty-seven, had healthy lungs.

(6) The size of the trachea is, therefore, shown to be larger than the size of the two bronchia together in eleven subjects, who may be thus summarised: the little boy who died from croup, three emphysematous subjects, four tuberculous (of whom one had a pulmonary emphysema), one with healthy lungs, one man with caseous pneumonia, and a man whose lungs were not examined, and in whom the difference was very small.

The conclusions to be derived from M. Sée's work are the following:—1. In the normal state the size of the two bronchia are equal to the size of the trachea; and it may be added that, according to a small number of measurements which he has made the size of the bronchial divisions is equal to the size of the bronchia from which they arise. The respiratory ducts, therefore, represent a cylinder and not a cone. 2. In a pathological condition the balance between the relative size of the trachea and of the bronchia is lost, so that sometimes the size of the bronchia is increased, as in chronic tuberculosis, and sometimes the trachea is enlarged, as in cases of emphysema.

SICKNESS IN THE RUSSIAN ARMY.

SOME confirmation would appear to be given to the news which comes from Constantinople of persisting excessive sickness among the Russian forces south of the Balkans, by a despatch which, according to the Russian *Messenger of the Red Cross*, has been recently received from General Totleben at St. Petersburg, asking that at least 5000 additional beds might be provided in South Russia for sick soldiers to be sent there by sea. In consequence of this despatch orders have been issued by the military authorities for the provision of 2800 beds, to be distributed in the cities of Odessa, Nicolaiev, Sebastopol, and Theodosia, in addition to the 2500 beds already existing there. Moreover, the Central Committee of the Red Cross Society has sent telegraphic orders to Kharkow and Kiew, directing that the necessary material for furnishing 1100 beds shall be despatched thence to the towns on the Black Sea. The Red Cross Society has already 1000 beds in hospital huts at Odessa. Further, the Society has taken measures for organising large tent-hospitals, and has despatched a numerous contingent of sisters of charity to take charge of the new hospitals.

THE METROPOLITAN ASYLUM HOSPITALS AND THE LONDON SMALL-POX EPIDEMIC.

THE proportion of deaths from small-pox recorded in the Metropolitan Asylum Hospitals during the present epidemic has very considerably exceeded that which prevailed during the epidemic of 1870–1–2. From the beginning of 1870 to the end of March, 1872, 9665 fatal cases of small-pox were registered in London, of which only 2763 occurred in the Metropolitan Asylum Hospitals; whereas, during the two years ending June last, of 4420 deaths from small-pox, 2254 were recorded in these hospitals. Thus, while less than 29 per cent. of the fatal cases in the epidemic of 1870–1–2 occurred in these hospitals, the proportion during the present epidemic has increased to 51 per cent. In the earlier epidemic the proportional mortality to cases treated in these hospitals averaged 18·7 per cent.; while the rate of mortality in the present epidemic has risen to 20·8 per cent. of the cases treated. As, however, there is no ground for believing that the relative mortality in and out of hospital in the two epidemics has differed, it will be safe to attribute the large increase in the proportion of fatal cases recorded in these hospitals during the present epidemic to the increase in the proportion of cases treated in hospital. Whether this increased utility of the Metropolitan Asylum Hospitals be due to the increase of their number from two to five, which has thus facilitated the removal of cases, or to the

greater energy displayed by sanitary authorities in securing the removal and isolation of small-pox cases, or to a decline of the prejudice among the working classes against the use of these hospitals, there can be no question that the fact is satisfactory evidence of sanitary progress. No one who is acquainted with the localities in which most of the fatal cases of small-pox occur, and with the class of the sufferers, can doubt that hospital isolation, in nineteen cases out of every twenty, affords the only reasonable hope of preventing their becoming centres of infection. If future small-pox epidemics in London are to be effectually controlled—and, without a more perfect vaccination system, we dare not hope that we have had our last—the proportion of cases treated in hospital should be still further increased to at least 95 per cent. of the total cases.

VOLUNTARY SANITARY INSPECTION OF EDINBURGH.

IT would be difficult to find more conclusive evidence in favour of strict supervision of private houses than the first report just issued by the Edinburgh Sanitary Protection Association. We have mentioned this Society several times in these columns, and need scarcely recall that it is a private association, by which the members have secured the services of sanitary engineers to inspect annually their houses. Eighty-five inspections have now been completed, and only ten houses out of this number were found in a satisfactory condition. In nine cases the pipes that carry away the waste water from baths, handbasins, and sinks were in connexion with the drainage system, and the soil-pipes were not always properly ventilated. In eighteen houses similar connexion with the soil-pipe was more direct and dangerous. Forty-eight houses had also cistern overflows discharging into soil-pipes, and these were in many cases situated in the centre of the house, and found to be out of repair, and so imperfectly ventilated as to offer the gravest dangers. Some of these houses had leaking drains, others cesspools that were not water-tight, and deposits remaining in them and impeding even the traps. Some of these latter were totally useless; and in some houses the water-cisterns were foul through neglect. In almost all the houses inspected the disconnexion from the main sewer depended on a single trap, and in these cases the Association has recommended for all but foul waters an open channel, particularly with regard to bath-rooms, as the hot water causes a more rapid formation of gas, and tends to deteriorate the pipes by expansion and contraction due to heat and cold. All connexion between the drinking-water supply and the supply for flushing drains is to be discontinued if the Association is able to enforce its advice. These voluntary efforts, pending the more effectual intervention of some future laws, are worthy of the utmost consideration. If seventy-five out of eighty-five houses belonging to persons sufficiently educated to appreciate the benefit of such a society were found to be in so defective a condition, what must be the state of the dwellings of the poor and ignorant.

SCHOOL-SHIPS.

THE *Shaftesbury*, a London School Board school-ship, is nearly completed, and during the next month will be moored in the Thames, off Grays, close to the *Exmouth*, the training-ship for pauper boys. We learn from the *City Press* that a house has been hired in the neighbourhood of Grays, "suitable for the purposes of an infirmary," in connexion with the *Shaftesbury*, and that the port sanitary authorities have called the attention of the Board to the fact that this vessel, in common with all others lying within the boundaries of the port, will be subject to the provisions of the 110th sec. of the Public Health Act, 1875. This section works successfully as regards school-ships in the port of London, inasmuch as the port sanitary authorities are quickly informed as to the outbreak of any epidemic disease in these ships, and are enabled to co-operate with the respective school committees in working to prevent the spread of the malady. As regards hospital accommodation, it appears that, in spite of advice given from time to time in the reports of the corporation (as sanitary authority of the port), no unity of action has as yet obtained. Proceeding along the river from above downwards, it appears that the Marine Society's ship *Warspite* is, comparatively speaking, so close to the Seamen's Hospital at Greenwich that no permanent hospital is required in connexion with that school. The *Cornwall*, a reformatory training-ship, is still entirely unprovided with hospital accommodation (with the exception of that necessary evil on board called the sick-bay), although experiences gleaned in an epidemic of typhoid some two and a half years ago must have demonstrated in a sadly practical way the advantages of systematic hospital accommodation ready to hand. The homeless boys of London, represented by the *Arethusa* and *Chichester*, have nothing but sick-bays, and are, as we are informed, "looking out" for hospital accommodation afloat or ashore, but are practically dependent upon the sanitary authorities for aid, if any pressure occur. The committee of the Nautical Training College (represented by the *Worcester*) have obtained a small hospital at Greenhithe that is sufficient for their wants, and the *Exmouth* is similarly provided for at Grays. All these arrangements are, of course, in a certain sense, fragmentary, and some of them are not popular with the inhabitants of the neighbouring villages. On the score of economy, as well as efficiency, we subscribe to the plan suggested in the reports presented by the Port Sanitary Committee to the Corporation—viz., that these school-ships should co-operate and obtain the loan of another ship from the Admiralty, or buy a vessel and keep her as a hospital-ship. She could, as is suggested, be moved and moored in any convenient position. Her ordinary cost for maintenance would be very small, and no charge of infecting the foreshore inhabitants could be brought against the floating population—a charge that now is, as we are informed, almost invariably made whenever an epidemic occurs on any of these school-ships.

LOCAL TEMPERATURE.

M. PETER lately communicated to the Académie de Médecine an interesting note on local temperatures. He has found that in pleurisy the parietal temperature is always higher than the average parietal temperature, which is 35·8 C. (96° F.) The local increase is from half a degree to 2° C. higher, and may even rise still more. The elevation increases with the effusion, and decreases during the stationary period of the effusion, but in general the parietal temperature of the affected side is from ·5° to 1·5° C. higher than the opposite side. The local temperature gradually falls when the effusion undergoes spontaneous absorption, but remains several tenths of a degree higher than that of the normal side. This persistence of the local elevation explains the possibility of a relapse. In cases of pleurisy without effusion the local rise is less than in cases with effusion, and the return of the normal temperature is more rapid. The degree of elevation of the local temperature is greater than that of the axillary temperature, and the local precedes the axillary rise—a fact which demonstrates the influence of the local process on the general temperature. When the effusion is removed by paracentesis, a sudden local rise of temperature occurs, which is explained by M. Peter as due to the sudden hyperæmia of the vessels from which the preceding pressure has been withdrawn; and this hyperæmia explains not only the more abundant cells of the second

effusion, but also the syncope, pulmonary congestion, and dyspnœa sometimes observed when a large quantity of fluid is suddenly removed.

FATIGUING THE TROOPS.

WE are not prepared to assert that it is impolitic to test the capabilities of each branch of the service in piping times of peace, but whether it is desirable to march a regiment in the piping heat of a summer's day for the mere sake of exercise is a question upon which some not incompetent judges venture to differ widely from the authorities. Our own opinion, expressed concisely, is that the practice is reckless to the extent of being absurd. Avoidance of the hours when the sun is rising to its zenith is so obvious a precaution to be overlooked that it can only be intentionally omitted. The recommendation that troops should not be subjected to severe exercise in the sun will, we presume, be allowed to take effect after the recent renewed experience of the contingencies attending a contrary practice. Meanwhile we cannot but urge very serious consideration for the question whether the ordinary training and mode of life to which the British land forces are submitted is of a nature to produce the highest powers of endurance. It is an unpleasant reflection that what has now repeatedly happened on a march for ordinary parade duty might occur, and could scarcely fail to entail disastrous consequences, in actual service. What is the real cause of this inability to perform a not very severe labour?

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

A SPECIAL general meeting of the Association will be held at Bath, on a day and hour hereafter to be fixed, during the ensuing meeting of the British Medical Association in that city. The Council is desirous of obtaining well-authenticated cases of refusal on the part of boards of guardians to allow the extra fees they have contracted with their medical officers to pay. Particulars of all such cases should be sent either to Dr. Joseph Rogers, Chairman of Council, 33, Dean-street, Soho, London, or to Mr. J. W. Barnes, Hon. Secretary, 3, Bolt-court, Fleet-street, City.

The Council will be further much obliged if gentlemen will forward any instances of obstruction or annoyance to which they have been exposed in the performance of their duty; as it is resolved that at this meeting vigorous remonstrance shall be drawn up and forwarded to Mr. Sclater-Booth, President of the Local Government Board, calling his attention to the many grievances which Poor-law medical officers labour under, and praying him to take such steps as may tend to their removal.

SPIDER WAISTS.

THE demands of fashion are inexorable, and not unfrequently oppressive. In some cases, for example, in regard to the limits imposed on the size of a waist, compliance must be painful. The endurance displayed by those who contrive to produce the "spider waist" is not sufficiently appreciated, nor are the risks they run, and, in some marvellous way, manage to survive, properly recognised. Something nearly approaching strangulation of the viscera must be effected to procure the degree of apparent *dis*continuity which is established between the thoracic and pelvic regions of a fashionable dame. The old warnings are not available in the argument against the modern practice of tight-lacing. The limits at which the physicians and surgeons of the time of Abernethy fixed the practicable in waist-compression have clearly been passed, and it is idle to hope to deter the sisterhood of auto-anatomists from their enterprise of immolation by remonstrances based upon the old lines of prescription. It is, we are aware, perfectly useless to suggest that the practice of tilting the foot at an angle of some forty degrees, so that the whole system of statics is disturbed, and the further complication of bandaged knees, form ungraceful innovations on the natural habit. We even despair of arousing anxiety with regard to the perils which must daily beset any further constriction of the waist. It is, however, a duty to protest against these monstrous fashions, and common-sense suggests the question, Whom are they meant to please, or what to gain?

THE BARNSLEY UNION WORKHOUSE.

A FEW years ago we felt called upon to speak somewhat severely of the conduct of the Barnsley guardians in adding to the duties of the medical officer of the union workhouse by giving him the charge of a new fever hospital while refusing to give him any additional salary. We regret to say that, judging from a report in the *Barnsley Chronicle*, the guardians have just lost an opportunity of making a gracious *amende* for such unreasonable treatment of a tried servant. Their medical officer has tendered his resignation, doubtless because he was reluctant to be again refused in making a just demand. The chairman and other members of the board were anxious to meet the resignation by an offer of increased salary, but the guardians who had added the risk and the care of a new fever hospital to the work of a servant already overworked, without any pecuniary recompense, had no difficulty in finding arguments against the chairman's proposal. "Plenty of young men were to be had." Perhaps so. But probably even young men may be unwilling to take the risk of fever for nothing, and to serve masters whose sense of justice permits them to expect service on such terms. Be this as it may, we congratulate Mr. Stewart on his release from such service.

OPHTHALMIA.

OPHTHALMIA has been very prevalent in the Mitcham Schools for a long time past. We have more than once urged on the guardians of the Holborn Union (who are responsible for the state of the establishment) the adoption of thorough and energetic measures for the eradication of the disease, the incomplete and half-hearted measures hitherto employed by them being useless, if not positively mischievous. The evil has of late assumed a sufficiently serious aspect to warrant the interference of the Local Government Board, and we find that at a late meeting of the Holborn guardians the following serious charges were made by the representatives of the Local Government Board:—"There was very great overcrowding at the schools, 500 boys being kept in premises which on measurement were found to be able to accommodate only 394. The day rooms, or dormitories, were quite insufficient; the hospital was defective, while there was a discreditable want of cleanliness generally."

HAIRY MEN.

AN interesting sketch of this strange anomaly, which has in all ages attracted the notice of the curious, has been published by Professor Ecker, of Freiburg, and dedicated by him to the veteran von Siebold, as a *Gratulationschrift* on the occasion of the jubilee of the latter's doctorate. The well-known cases are first described, and to them one new case is added—that of a woman who was exhibited at an inn in Freiburg in 1876, but hanged herself in the beginning of the following year, and so came to the dissecting-room. At the autopsy no marked deviation from the normal was discovered. Amongst the illustrations is a curious portrait of a case at Basle, which was made about 1653. From a comparison of recorded cases Ecker concludes that there are three forms of hypertrichiosis: (1) the so-called hairy men in whom the condition is due to the persistence and further development of the embryonal covering of hair, commonly

associated with defective dentition, and hereditary; (2) the local or general transformation of downy hair into well-developed hair, in which is to be reckoned the appearance of a beard in women, premature and undue growth of hair upon the male body, and a local excessive growth of hair, as upon the pubes; (3) an abnormal growth of hair on parts of the skin which are morbidly changed and irritated. The first form Ecker has studied in greater detail. In the fifth month of fœtal life there appears on the embryo a light down, first observable about the nineteenth week in the position of the eyebrows and the forehead, at the twenty-third or twenty-fifth week on the extremities, so that the hairy investment is completed at the end of the sixth or beginning of the seventh month. This is present on the head as the forerunner of the hair of the head, but is most distinct on the face, especially around the mouth, on the forehead, and on the neck. The lines in which this hair is arranged, and which in regard to the origin of the general growth of hair is of great importance, were carefully described in 1837 by Eschricht. This downy hair falls off after birth; and when it persists, in consequence of an arrest of development, the condition of hypertrichiosis universalis results. That this is the true explanation of such cases is probable from the fact that when this hair persists as a soft woolly down, resembling that of the embryo, it is especially dense in the same situations as those which Eschricht signalised as being the positions of special development on the embryo. At present there are not sufficient facts on record to enable us to draw any conclusions regarding the connexion of this hairy development with the defective dentition with which it is sometimes associated.

SHOEING OF HORSES.

WE have received many communications on the subject of shoeing horses, with the general effect that the weight of opinion seems in favour of discontinuing the practice, at least as an experiment. A concurrent suggestion is to devise a shoe attached by some simple apparatus and capable of being removed at night. The attempt to secure this object was made many years ago by the late Mr. Wakley, and the method he proposed has been reproduced with modifications. It consisted essentially in the construction of a casing for the hoof secured above the heel, the shoe being of metal secured by the "upper," which enveloped the foot. In brief, the construction was a boot, and it admitted of being removed at pleasure; thus placing the horse on the level with the man, who does not, as a rule, wear his boots in bed. The suggestion is capable of being worked out by any ingenious maker. The point to secure is, of course, the integrity of the fastening. This may be attained by a screw or double clamp above the heel.

ORGANISMS IN TYPHOID.

IN 1870, Feltz and Coze observed an organism in the blood in typhoid fever, and lately Feltz has succeeded in cultivating typhoid blood. He took some blood from the median basilic vein of a woman suffering from typhoid fever, observing all the precautions insisted upon by Trousseau to avoid contamination by foreign organisms. It was kept at a temperature of 30° to 35° C. for several weeks, and with it were placed three "control" fluids, treated in the same way—namely (*a*), the blood of a dog taken from the crural vein, and (*b* and *c*) decomposing ammoniacal urine filtered *in vacuo* through carbon. When opened, the dog's blood had no smell of decomposition, and contained hæmoglobin crystals, but no trace of organisms. The urine contained crystals, but no organisms. The typhoid blood exhaled a peculiar smell, not so penetrating as that of decomposition, and it contained no crystals, but, besides deformed blood-corpuscles, an enormous number of oval bodies, partly free, partly arranged in series, without movement. Hence Feltz concludes that normal blood contains no organisms, that the organisms of putrid urine can be separated by filtration through charcoal, but that the blood in typhoid contains organisms capable of undergoing development.

KING'S COLLEGE HOSPITAL.

VISITORS to King's College Hospital are aware that the walls of the operating theatre are adorned by medallion portraits of many distinguished surgeons, as John Hunter, Astley Cooper, Charles Bell, William Harvey, Wiseman, Baillie, and Jenner. To these has been recently added a well-executed medallion of the late Sir William Fergusson, the gift of Mr. Henry Smith. It is placed in a prominent position on the wall above and behind the operating theatre. The likeness to the original is good, and in some respects striking. The medallion is the work of Mr. Piercey, a pupil of Mr. Woolner, R.A., and modelled from one of the latest photographs of Sir William Fergusson.

A NEW SCARE FOR PAUPERS.

IT would seem that the measures of repression at present in force to crush out the practice of out-door relief are not deemed sufficiently forcible, and a new expedient is to be adopted. In pursuance of an Order recently issued by the Local Government Board, boards of guardians will, it is alleged, be empowered "to print and circulate lists of the persons receiving out-door relief." There should be something flattering to *l'amour propre* of the pauper in this appeal to his sense of self-respect. It has not been the habit of the Poor-law authorities to treat him on the presumption of his being stirred by "gentlemanly" emotions. Members of clubs have been "posted" for not paying their subscriptions, and for a time the convictions obtained by railway companies were wont to be paraded in conspicuous type at the principal stations. That the recipients of out-door relief should be emblazoned as a measure of intimidation, is a novel step, and, perhaps, in the right direction. The Local Government Board evidently begins to understand the habitual pauper better than heretofore, and both the authority and the victim of this fresh device are to be complimented on the progress of mutual appreciation, and—may we not add?—of respect. None but an honourable class of folk, possessing some delicacy of feeling, could be expected to be moved by the publication of their misfortunes.

AMBULANCES.

THE Fulham Board of Works again draws the attention of the small-pox hospital authorities to a dangerous practice that still prevails among the ambulance drivers and attendants. These officers, having deposited the patients at the hospital, appear to consider it their first duty to take refreshment, adjourn to the nearest tavern, and spend time there that should be employed in the disinfection of the vehicle and its belongings. Stringent measures ought to be adopted so as to prevent a recurrence of this objectionable practice, one among the many ways in which the disease is disseminated about the metropolis.

THE CASE OF DODWELL.

THE position in which the case of Dodwell is left is not satisfactory. We are at a loss to understand the status which a voluntary opinion, expressed by medical men examining a lunatic or reputed lunatic, occupies in the cognisance of the Secretary of State. The Home Office has at its disposal the means of obtaining competent counsel in dealing with the case of any prisoner, either from medical men holding officially responsible posts, or, if it should be preferred, from outsiders who may be consulted in due form.

It would be a misfortune if the duty of the State were discharged, or even appeared to be discharged, by voluntary action. That being so, we venture to express the hope that Mr. Cross will perceive the expediency of making an additional statement in respect to this matter at an early opportunity. The assertions which have been published will fully justify, although they do not, of course, *require*, an official announcement, to remove misapprehensions which are widespread.

HARVEY TERCENTENARY MEMORIAL FUND.

THE sum subscribed now exceeds £1750, and only £250 further are required in order to enable the Committee to close the subscription list. Amongst the latest additions to the Fund are—one of £25 from the Society of Apothecaries of London; one of £25 from the Warden and Fellows of Merton College, Oxford; and one of ten guineas from the South-Eastern Branch of the British Medical Association. The sub-committee recently appointed by the subscribers for the purpose of selecting a sculptor has already had one meeting, and will assemble again, at the Royal College of Surgeons, on Wednesday next.

FISH IN HOT WEATHER.

THE remarkable rapidity with which fish spoils in such hot weather as we have recently experienced is well known to all housekeepers. Very large losses must have been sustained by the fish-dealers in consequence of this tainting effect of a high temperature. We observe that at a late meeting of the Commissioners of Sewers for the City Dr. Sedgwick Saunders stated, in reply to a question on the subject, that he was aware of a method of keeping fish fresh for fourteen or fifteen days by immersing it in an innocuous bath, the chemical contents of which did not affect its taste, and which were, moreover, comparatively costless. It would not be difficult to hazard a guess as to the composition of the "bath," but we would venture to suggest to our able *confrère* that the publication of a handbill, under the auspices of the Commissioners, giving simple directions for conserving fish in hot weather, would prove of immense value alike to the trade and to private families. It would also lessen the work of the officials of the Commissioners, who are now largely engaged in the destruction of condemned fish.

DUST AND DUSTBINS.

THERE is again the customary outcry against the nuisance of dust and dustbins. The former arises from the absurd custom of paving the roadways with stone; the latter accrues to our blind adhesion to the practice of treasuring up the refuse of house-cleanings and kitchen waste until the heap rises to the dignity of a local nuisance. The remedy for each of these evils is obvious, but plain ways of getting rid of a burden or annoyance are not, as a rule, appreciated. The individual measure of reform which would abolish the area dustbin is too irksome for Paterfamilias to undertake, and the district policy of adopting wood-pavements calls for more energy and farsightedness than vestries, generally, are prepared to exhibit.

SOME short time since an outbreak of typhoid fever occurred in the borough of Wolverhampton. All the fourteen cases reported to the sanitary authority were at once removed to the hospital, and, with the exception of one, all recovered. Happily, this and the other energetic measures adopted have been successful; no other cases have been reported. Five weeks after the admission of these patients, the house-physician, Dr. Pinnell, was attacked with typhoid, and about the middle of the sixth week of his illness he died from exhaustion. The Weekly Board, at their meeting on June 25th, unanimously passed the following resolution—"The Weekly Board desire to express their deep regret at the illness and death of their house-physician, Dr. Pinnell. Dr. Pinnell was an exceedingly promising young physician, and seemed to have every prospect of a distinguished professional career. His attention to his medical duties was exemplary."

THE committee of the Westminster Hospital have recently received from Messrs. Butterfield and Mason some very suitable subjects in chromo-lithography for furnishing the walls of the surgical wards. Mr. Robert Montague has also given frames for many of the oleographs, thereby not only adding to the attractiveness of their appearance, but also protecting them from dust. Such acts of liberality are most useful and praiseworthy.

DR. FRANKLAND, in reporting upon the purity of the water supplied to the metropolis, states that the water delivered by seven of the eight London water companies was "so much polluted by organic matter as to be unfit for dietetic purposes." The degree of pollution was very unusual for the summer season, and the Southwark, Grand Junction, East London, and New River Companies delivered water which was very inefficiently filtered.

THE 1511 deaths registered in London last week included 19 from small-pox, 31 from measles, 19 from scarlet fever, 11 from diphtheria, 108 from whooping-cough, 17 from different forms of fever, and 145 from diarrhœa. Measles shows a tendency to increase, whilst whooping-cough, which in the week ending the 30th ult. had declined, last week resumed its former degree of fatality. The deaths from diarrhœa exceeded the corrected weekly average by 11.

A DEATH from hydrophobia took place last week in Sir Patrick Dun's Hospital, Dublin. It appears that the deceased was a child aged five years, who had been bitten by a dog on the 5th of last April. The wound, which was on the right arm, was dressed at a hospital, and no untoward symptoms occurred until the evening previous to her death. Next morning she became delirious, and was admitted into hospital, where she succumbed after a few hours.

MR. GEORGE MAY, jun., the senior surgeon to the Royal Berks Hospital, has sent in his resignation, having been twenty-two years on the staff. The vacancy thus created will probably be filled by the promotion of Mr. Francis Workman, the present assistant-surgeon. For the assistant-surgeoncy there are three candidates—Mr. Royds, Dr. Phillips, and Mr. Armstrong.

IT is announced that the Middlesex Hospital will be closed from July the 15th to Sept. 15th. If we remember rightly the hospital took a similar holiday but a very few years since. The fact that it can do so seems rather to show that the hospital accommodation of that part of London is excessive, or that an undue amount of work will be thrown on the nurses.

THE landlord of a tavern near Slough was fined £4 some few days ago for exposing himself in the tap-room and elsewhere before the desquamation of small-pox had ceased. He pleaded an excessive love of society, and found it impossible to lead a solitary existence, even at the risk of imprisonment.

THE managers of the Metropolitan Asylum District Board are about to temporarily close the small-pox hospitals at Homerton and Stockwell, for the purpose of cleansing and repairing. Patients in the meantime will be sent to Hampstead and Deptford.

A SPECIAL meeting of the governors of the Wolverhampton Hospital was held on the 2nd inst. to elect a third honorary physician. Dr. Joseph William Hunt was elected. This gentleman is a distinguished student of University College Hospital, and is a Doctor of Medicine of the University of London, at the examination for which degree he obtained the first place and the University gold medal, having previously carried off at the examination for the M.B. a first class in honours and a gold medal in medicine.

H.M.S. *Undaunted*, now stationed in the East Indies, is reported by the *United Service Gazette* to be in an unhealthy state. The latest advices indicate that about a fourth of the crew are, or have been, on the sick list, that a fleet-surgeon and a surgeon attached to her have died, and that the third senior medical officer attached to her has recently been invalided.

THE *Shipping Gazette* reports an outbreak of scurvy on board the barque *Abercarne* that occurred between the Western Islands and England. An official inquiry as to the cause was held at Falmouth on the 4th inst., under the auspices of the Board of Trade, and it was shown that the disease had affected all of the crew in a greater or less degree.

ABSTRACT OF THREE LECTURES

ON THE POSITIVE IN REMEDIAL ART.

Delivered before the Faculty of Physicians and Surgeons of Glasgow in the Session 1878.

BY B. W. RICHARDSON, M.D., LL.D., F.R.S.

WHEN I first began to consider in what manner I should best respond to the honour you have conferred on me in electing me your lecturer for the present session, it chanced me to retrace a skeleton of a work I have in hand on the history of the science of medicine in the present century, with special reference to the facts which have come under my own observation in the third of the century in which it has been my privilege to take part as an observer and fellow-worker. In such a study, or I had better say outline of a study, I found various texts from which a course of lectures might be written. There were texts biographical, physiological, pathological, psychological, and many more, any one of which might have been suitable, and some of which might have been more suitable for the display of artistic construction of the lecture than the one I have selected. But I gathered that your wish was for something practical rather than literary, and so I kept that object in view.

Thus looking out over a wide field for a limited point, and looking back over my own life as a practitioner of medicine, I began to think of the question, What is known of a *positive* kind in respect to remedial art? In plain words, what can we say with certainty, not to our patients, but to ourselves, as to our positive skill in the way of cure when a sick man comes before us? Or, suppose we have treated a sick man, and that sick man has recovered, how far can we declare solemnly, our own conscience being our judge, that what we did led to that recovery: that accident had no part, and art had every part in the result?

Again, without particularising any disease as cured, what do we know positively about the action of the medicaments which we have used and are using? Have we any positive knowledge respecting them, and how far does that knowledge extend?

These are the questions I came to ask of myself. Am I alone in this exercise of self-examination? I trow not. I undertake to say there is not a practitioner now listening to me who has not asked himself the same questions a thousand times. It is to the answer to these questions I propose, then, to invite attention.

I told my scheme to one whom I most admire as a careful and trained observer of disease and its treatment. "Carry it out," he said, "but with closed doors; for if you tell the truth I fear the world would not listen to it all." I pondered over this advice too; and I asked again, Is it so really? Do many thousands of us Æsculapians go on from year to year prescribing our nostrums and giving our directions, and can we only discuss the good that is in such work with closed doors? Thereupon I devoted some time to the investigation of this particular question as a preliminary. For if it were true that I must not speak what all who can understand may hear, then I ought certainly not to speak, and I doubt whether I ought to practise. The effort satisfied me that the fear expressed by my friend, though it is often expressed and even made matter of joke, is not a correct or justified doubt: there is, I discovered, a positive side to remedial art, and there is so much that is so near to what is positive that we may treat of it freely and not be ashamed.

When I speak of positive knowledge in remedial art, let me at once define that I speak in these lectures exclusively of knowledge that is confined to the direct treatment of disease by remedies. In other parts of our work there is so much that is positive, it were vanity to defend ourselves from any charge that would lower us in this respect below the representatives of other sciences and arts. We have in our possession a noble history of science, and may easily become the most accurate of scholars in that history—none of any other department more accurate. We have cultivated anatomy with so much care and resolution since the time of our master, the illustrious Vesalius, we may be said to have perfect knowledge of that detail of our learning; and if in physiology we have yet much to learn, that which we have learned and resolved upon as accepted and proved is so large, that from it a massive volume of positive science might be compiled—a work which I trust some judicial and learned inquirer will one day, and one early day, commence. In chemistry we have kept fairly on a level with the school of chemists themselves in correct progress, while from our own schools we have sent to the chemists some of the truest and wisest explorers, of whom, as such explorers, Glasgow alone has sent forth two of the most distinguished in Thomas Thomson and Thomas Graham.

When again we turn to some of the immediately practical parts of our labours, we have cause to be proud and reliant for very much that has been secured. Since Morgagni led the way to the seats and causes of disease, what solidity has been rendered to pathology. Give now one part of a morbid structure, one organ of a diseased body, to a pathologist, and with what skill will he unravel the whole course of diseased changes that attend the single change which is under his observation. How easily he will trace back that change to its origins, and how precisely point out what would be the result of its continuance. On these points our knowledge is becoming so exact and reliable the physicists themselves are willing to admit us as associates in physical research. We have even learned in this field so perfectly that we can institute a synthesis of some diseases. We take the weight of an animal, say of a frog, during its life, we introduce into its circulation a known quantity of diabetic sugar, and in regular order of time diabetic cataract is developed in that living animal. The time of complete obscurity of vision or maximum of opacity may be calculated to a second, and the times of clearance from the first stage to the last may be calculated with equal precision. We weigh another living animal, and charging its blood with a grain weight of urea, we can calculate to a minute the period when the insensibility and convulsion of uræmia will occur. All this, and much more of a pathological kind, is positive science.

When we turn from pathology to prognosis we find once more a large field of exact and perfected information. So true now are many of the means of physical exploration, we become as certain of the evil as if we could veritably see it, while in some cases we can veritably see what to our forefathers was the unseen. No fact, indeed, is more remarkable than the rapid advancement that has been made of late years in this section of our art—diagnosis. It is, indeed, rare to find any great discrepancy in these days in matters of diagnosis. There is yet scope for refinement of difference on some debatable points; but, taking the profession all in all, it is good and sound in diagnostic skill, and is possessed of as much positive acquirement as many of the more mechanical professions, where the same order of mind that constructs the instrument inquires into its failings.

And this positiveness of knowledge in matters diagnostic is, I think, not less pronounced in matters prognostic. It is

true that prognosis is apt to be somewhat warped by natural characteristics of mind. It is true that the practitioner who is of nervous and bilious temperament is liable to prognose differently, on the same data, from him of the sanguine temperament. It is true likewise that both are liable to differ, still on the same data, from that lymphatic type of a man who takes things just as they happen to come, and sleeps the same sleep after sadness as after mirth. But these variabilities are but expressions of the men apart from the science. Take from the men the ideal of sentiment, and their judgments are fairly equal. See them all measuring up the value of lives of persons who are entire strangers to them in the consulting-room of the insurance company, and the difference of prognosis between them is so small that it would not modify by its results the value of the calculation of insurance to any appreciable degree in a long period of years.

(To be continued.)

Correspondence.

"Audi alteram partem."

FILARIA SANGUINIS HOMINIS.

To the Editor of THE LANCET.

SIR,—The original announcement of the discovery of the sexually mature filaria infesting man, made in your pages about this time last year, followed as it has been by numerous interesting communications both at home and abroad (including the recent letter of Mr. David Hoadley Gabb, of Hastings, who states that he has a female under his care forming "the habitat of the *Filaria sanguinis hominis*"), induces me to ask you to report the rapid progress that is being made on this subject. Scarce a day passes that something new does not turn up; consequently it may add interest to the promised communication on the part of Professor Beale if we pass in review the leading facts as they now stand. I am the more desirous of being instrumental in this record, inasmuch as my communication of the details of Manson's discovery of the intermediate host (read to the Linnean Society in February last) has not yet been published, and I am constantly receiving inquiries from abroad, to which detailed replies cannot very well be afforded. Professor Carl Vogt's recently-published Geneva address (Die Herkunft der Eingeweidewürmer des Menschen) makes no allusion to Bancroft's discovery, but Dr. Sonsino in part supplied the deficiency by a brief communication to the Congress (Nouvelles Recherches sur les Hématozoaires de l'Homme en Egypte). To prevent error, I may perhaps be allowed to say that the twice quoted "Prof. Lobbold, de Londres" is a printer's mistake, for which Dr. Sonsino is not responsible.

In the fourth of a series of papers read before the Microscopical Section of the Birmingham Natural History Society, I have given a *résumé* of the facts relating to filaria. The delay in the publication of the paper permits of my utilising a portion of its contents. Employing the designation *Filaria Bancrofti*, the following are the principal synonyms of this entozoon:—*Filaria sanguinis hominis*, Lewis; *F. Wüchereri*, Cobbold (conditionally); *Filariose dermathemica*, O'Neill; *Filaris sanguinis*, Bancroft; *Trichina cystica*, Salisbury. These synonyms all originally referred to the embryonic condition; but the embryos have also been described as nematoid hæmatozoa, micro-filariæ, hæmatochylous helminths (Corré), worms of Guadaloupe (Crevaux), worms of Brazil (Wücherer), probably embryos of Stronglidæ (Leuckart), anguillula-like microscopic nematodes (Sonsino). Dr. Bancroft originally suggested and Dr. Manson actually discovered that the hæmatozoal micro-filariæ were passively transferred to the stomach of mosquitoes. Dr. Manson has described the transformations undergone by the larvæ within these insects. He induced an infected Chinese to sleep in a mosquito-house, and thus procured on the following morning a number of mosquitoes that had gorged themselves with blood containing human filariæ. A relatively far greater proportion of hæmatozoa existed in a drop of the in-sucked blood taken from the mosquito than in a drop taken from the Chinese in a direct manner. The construction of the proboscis of the female mosquito seems to be especially adapted for drawing the worms out of the capillary blood-vessels.

With the caution of a true *savant*, Dr. Lewis gives only a qualified assent to Manson's discovery, observing that "it cannot be said that even these later observations (of his own) are sufficiently conclusive to warrant a positive statement being made." Dr. Lewis says that "no trace of reproductive organs" is distinguishable in the embryos from the mosquito. Had my Linnean paper appeared, I think he would have come to a different conclusion. At all events, the professional aspects of the subject are of surpassing interest, since there is every reason to believe that the microscopic hæmatozoa of man are capable of producing a variety of diseases, some of which are endemic. In this category must be placed certain forms of hæmaturia, chyluria, varix, elephantiasis, and other lymphoid affections, and likewise the African cutaneous disorder termed craw-craw. The whole of them have been characterised as constituting varieties of one disorder which Dr. Bourel-Roncière terms Wücherer's helminthiasis. The adult worm was first discovered by Bancroft and first described by myself. It was afterwards found and described by Lewis, and subsequently our "finds" were verified by Dr. Araujo and by Dr. F. dos Santos. The larvæ were first discovered by Wücherer, whose observations were afterwards verified and extended by Salisbury, by myself, and especially by Lewis. Free microscopic nematoids very closely resembling these larvæ have been found in the potable waters of Rio (aqua da Carioca) by Dr. Magalhães. Their genetic relation with *F. Bancrofti*, however, is, in my opinion, more than doubtful.

As regards the literature of the subject it is already voluminous, but I think the following selection embraces all the more important memoirs:—Wücherer, in *Gaz. Med. da Bahia*, Dec. 1868, and Sept., 1869, and in Hallier's *Zeitschrift*, 1869, and in *Arch. de Méd. Navale*, 1870; Salisbury, in *Hay's Amer. Jour.*, 1868. Cobbold, in *Brit. Med. Journ.*, July, 1872, and in Lectures on Helminth., 1872; in *B. M. J.*, June, 1876; in THE LANCET for July and Oct., 1877; in Reports of the Proceedings of the Linnean Soc.; of the Pathological Soc.; of the Medical Society of London; in THE LANCET for March; in *Nature* of the same month, and in the *Popular Science Review* for April, 1878. Leuckart, *Die Mensch. Par.*, Bd. II., 1876. Corré, *Rev. des Sci. Nat.*, Sept., 1872; Crevaux, De l'Hématurie chyleuse, &c., Paris, 1872; Silva-Lima (with Crevaux) Mem. sobre a hematuria chylosa ou gordurosa (Bahia, 1876), and in *Gaz. Med. da Bahia*, Sept., 1877, and in THE LANCET for March, 1878; Foncervines, in Robin's Leçons, 1875; Lewis, on a Hæmatozoon in Human Blood, in Gov. Rep. for 1872, and separately (Calcutta, 1874) in *Indian Annals*, 1873, in *Med. Press*, 1873, in *Lond. Med. Record* (rep. by me), 1873, in *Nature*, 1873, and in his memoir on the Path. Significance of the Nematode Hæmatozoa, Calcutta, 1874; see also Lewis's recent "Remarks regarding the Hæmatozoa found in the stomach of Culex Mosquito," in Proceed. of the Asiatic Society of Bengal for March, 1878 (p. 89); Sonsino, Richerche intorno, &c., in *Rend. della R. Accad. di Napoli*, 1874, and in *Arch. Gén. de Méd.*, June, 1876; Araujo, in *Arch. d. Méd. Navale*, 1875; Magalhães, P. S. de, in *Gaz. M. da Bahia*, 1877, and in *O Progresso Medico* for Dec., 1877; O'Neill, on Craw-craw, in THE LANCET, Feb. 1875; Bourel-Roncière, in *Arch. de Méd. Navale*, March, 1878 (see Araujo); Manson, Report on Hæmatozoa, in the sixth part of the *Customs Gazette*, Shanghae, 1877, and rep. in *Med. Times and Gazette*, also additional cases in *M. T. and G.* for March, 1878, also (in a joint communication with me) in rep. of the proceedings of the Med. Soc. of London, in THE LANCET, March 30th, 1878; Le Roy de Méricourt, in Appendix to Nouvelle phase de la question relative à la nature parasitaire de la Chylurie (Découverte du représentant adulte de la Filaire de Wücherer), being a translation of Silva Lima's memoir, quoted above (*Arch. de Méd. Navale*, Dec., 1877). See also translations, with additions, in the *Veterinarian* for Feb., 1878; Araujo, A. J. P. da S., Memoria sobre a Filariose, &c. (Bahia, 1875); see also Bourel-Roncière's analysis of, and commentary upon, the writings of Silva Lima and Silva Araujo in the *Archives* above quoted; Santos, F. dos, in *Gaz. Med. da Bahia* for March, 1877; Moura, J. de, Thèse de concours, 1877; Fayrer, Sir J., in THE LANCET, March 16th, 1877.

I am, Sir, your obedient servant,

T. SPENCER COBBOLD, M.D.

Portsdown-road, July 2nd, 1878.

"LITHOTRITY COMBINED WITH LITHOTOMY."

To the Editor of THE LANCET.

SIR,—I have read with much interest the articles of Messrs. Teevan and Macnamara in THE LANCET of June 22nd and 29th, and July 6th, concerning lithotriptic lithotomy, and hope that the discussion of the subject will be continued in some of the London medical societies, as it is one of great importance. The combination is an excellent one, and it is surprising that since Malgaigne called attention to it, so few surgeons have performed the operation, and those do not agree as to which of the two essential steps should be the first. The breaking up of the stone with a lithotrite prior to incising the perineum is insisted upon by some, and by others the reverse is practised exclusively.

I believe that there should be no absolute rule in regard to these points, for in some cases it would be unwise to make the lithotrity first, and in other cases it would be equally unwise to make the cystotomy or urethrotomy first. Six years ago, in two cases, I attempted to make the lithotrity first, and failed, because in neither case could the bladder tolerate the lithotrite before or during anæsthesia, but after having made a straight route in perineo to the bladder, after Dolbeau's plan, there was no difficulty in seizing and breaking the stone, which, in one case, weighed four ounces. Whenever practicable I think that the stone should first be reduced to small fragments with a lithotrite introduced by the natural passage, and these fragments at once extracted through as small an opening as can be made in the membranous portion of the urethra.

Dr. Reliquet, whom I had the pleasure of seeing a few days ago, showed me a large and very hard stone which he had broken by percussion in five fragments, at one seizure, with a strong lithotrite; then he made a lithotomy, and extracted the fragments. In a case of this kind I would prefer to incise first, and then use a very strong lithoclast through the perineal wound. I think that Mr. Teevan's point is well taken, for there is a great difference between fragmentation of a stone and the extraction of these fragments after trachœlo-*cystotomy* on the one hand, and, on the other, the reduction of a stone to fragments small enough to be expelled per urethram, and the extraction of these small fragments after an external perineal urethrotomy, followed by trachœlo-*cystectasy*.

I am, Sir, yours respectfully,

J. W. S. GOULEY, M.D.,

Professor of Diseases of the Genito-Urinary System in the Medical Department of the University of New York; Surgeon to Bellevue Hospital, &c.

Hotel Continental, Paris, July 8th, 1878.

ON THE OCCURRENCE OF A PUSTULAR CUTANEOUS ERUPTION IN PYÆMIC CASES.

To the Editor of THE LANCET.

SIR,—In your journal of the 22nd ult. a case of pyæmia is reported which occurred at Guy's Hospital, under the care of Mr. T. Bryant. The chief point of interest referred to in the report seems to be the fact that in both eyes there occurred a suppurative ophthalmitis. The reporter casually mentions, in enumerating the various symptoms of the case, that "the skin was covered with an eruption of pustules." This occurrence (I fancy one of extreme rarity) in pyæmic disease has been lately noted by me in two cases, and it may not be without interest that I should briefly detail them in your pages.

The first case was one of malignant pustule.

A young woman, a spinner in a large hair factory, was admitted on Oct. 10th, 1876, into my female ward in the Royal Infirmary with a well-marked anthrax of the lower lip. The whole lip was jet black, hard, and mummified, enormously swollen, and sticking out in a stiff and immovable position. The appearance of the original small pustule on the prolabium, and the rapid development from that small beginning of the grave state of affairs present on admission, were graphically described by her relatives. Evidently dying when first seen, she progressed rapidly from bad to worse, and expired on Oct. 12th.

When admitted no rash was observed on the body, but on the following morning the body, legs, and arms were found to be covered with a very minute vesicular eruption, looking quite like sudamina. In addition there were (I quote from a report taken at the time) "numerous small purpuric or hæmorrhagic spots, which do not disappear on pressure." The distribution of these latter was co-extensive with that of the vesicles. Very soon the contents of these clear, pearly, little vesicles began here and there to assume a purulent appearance, and ultimately, probably by confluence, they formed pustules of varying but, in some parts, of very considerable size. Before her death the body, legs, and arms were covered with an eruption in the main pustular, but here and there (where probably recent) consisting of clear vesicles. The distribution of these pustules and vesicles was unequal. At certain points on the skin they formed little closely aggregated groups or pleiads, while over the intervening spaces they were more diffused and scattered.

The following is an abstract of the post-mortem report, written by my friend, Dr. Foulis, the pathologist of the hospital, who conducted the examination:—Body examined twelve hours after death: Under lip and chin much swollen and discoloured, the lip being dry, caked, and brown. On being cut into, it creaks under the knife. The whole of the veins in the tissues of the lip and chin are full of pus. There is no pus in the jugular veins, nor are the lymphatic glands of the neck much enlarged, though rather congested. The whole surface of the body is dotted with minute purple spots, so small as to require close inspection to discover them, and there is also an eruption of pustules, the great majority of which are of similarly minute size, while a few are larger; one in particular, on the inside of the right knee, being of the size of an ordinary small-pox pustule. Chest: Both pleuræ are the seat of acute pleurisy, with copious layers of soft lymph. The left lung is everywhere of a dark-red colour, and a little reddish fluid can be squeezed out from the cut surfaces. The whole tissues of this lung are non-crepitant, and, though not devoid of flexibility, present a solid resistance. The right lung is also dark-red in colour, but subcrepitant everywhere. There are in this lung several small solid masses, of triangular shape and mottled-red section, which are mostly near the surface (infarcts). The average size is that of a walnut. Heart normal; no peri- or endocarditis. Liver and gall-bladder normal. Kidneys pale. The minute venous radicles on the surface are injected. Capsules easily removed. Here and there are small mottled red-and-white masses, of size of split peas, and of the same character as those in lungs (infarcts). Spleen is pulpy, of light plum-colour. Stomach normal. Gullet: In the cellular tissue behind the gullet is a hæmorrhagic effusion. The minute lymphatics in the gullet are injected in small beaded lines. Intestines normal, except near the ileo-cæcal valve, where there are in the mucous membrane of the ileum numerous minute, round, clear, raised dots, like enlarged solitary glands. Brain normal.

The second case, in which I have observed a similar eruption on the skin, may be shortly described as follows:—

A girl about ten years of age was admitted on the afternoon of the 3rd of May last. I saw her on the following morning, when she was evidently in a hopeless condition. She was extremely restless and delirious; her aspect was peculiarly livid and cyanotic; her breathing was rapid and laboured; her pulse could hardly be counted; while the temperature was exceedingly high. The great toe of her right foot had the appearance of having lately been crushed, and I learned from her mother that this accident had occurred about three weeks previously. It was now nearly healed. The right leg was œdematous, tense, evidently very painful to the touch, and red in front; and a slight examination served to show that there was an acute periostitis present, deep fluctuation being distinct over the tibia. Examination of the chest revealed the presence of a well-marked pericarditis. Over the whole cutaneous surface of the body there was a precisely similar eruption to that I have described above—what might have passed for a mixture of sudamina and minute petechial purple spots in the skin. These latter, although quite distinct, were hardly so well marked as in the case of malignant pustule. The eruption soon became pustular, and before her death her body was covered with pustules of very considerable size. As the child appeared to

be moribund, I contented myself with prescribing a little stimulant and ordering the painful limb to be kept wrapt in a hot fomentation. She lingered until next morning.

The following is the substance of Dr. Foulis's report of the post-mortem examination made by him:—The body is that of a young girl in fair condition. Over the surface of chest, back, head, thighs, and shoulders are a considerable number of pustules, varying in size from a pin's head to a pea. The right great toe is somewhat bruised, and incising over the right tibia, a quantity of turbid fluid escaped. The periosteum is separated from the bone for about six inches in length. Chest: Pericardium coated with soft yellow lymph, and contains about two drachms of turbid fluid. No other serous membrane inflamed. Heart normal in structure, but on the surface of the septum ventriculorum there is a small pustule, surrounded by a reddish zone (infarct). Lungs slightly reddened, but everywhere healthy and crepitant. Air-tubes, gullet, and stomach normal. Intestines also normal, except at the lower end of the ileum, where there is considerable congestion of the mucous membrane, and an enlargement of the solitary glands, which are like heads of pins on the surface. Liver, gall-bladder, and spleen normal. Supra-renal capsules softened. Kidneys: Capsules rather adherent; cortex dotted over with minute red and yellow points, in most of which is a tiny drop of pus. Pelvic organs, ureters, and pelvis of the kidney normal. Mesenteric and right inguinal glands rather enlarged, and red in colour. Brain and spinal cord normal.

These two post-mortem examinations proved beyond doubt that the cases were really instances of pyæmic disease, the infective origin of which, in the first case, was a malignant anthrax of the lower lip, contracted while spinning horsehair, and, in the second case, a crushed and suppurating big toe.

Dr. Foulis is of opinion—and, I think, with good reason—that the pustular cutaneous eruption in these two cases was probably the result of the infarctions occurring in the capillaries of the skin. He believes he has seen pustules in the mucous membrane of the intestinal canal arising from a similar cause. But, whatever its exact pathology, the symptom possesses interest on account of its rarity.

I am, Sir, yours, &c.,

Glasgow, July 1st, 1878. HECTOR C. CAMERON.

CARBOLIC ACID.

To the Editor of THE LANCET.

SIR,—It seems to me that the usefulness of carbolic acid as an internal remedy is not so widely known and appreciated as it ought to be.

I first began to use it about thirteen years ago, to check the vomiting that so frequently accompanies the cough in phthisis, and subsequent experience has only served to confirm my first opinion of its value in many cases of the kind. I am now in the habit of prescribing it in the following affections, often with marked benefit.

1. In vomiting, especially the vomiting of alcoholic gastric catarrh, or in ordinary acute, and sometimes chronic, gastric and gastro-duodenal catarrh.
2. In whooping-cough, where vomiting is a prominent and distressing symptom.
3. In the vomiting with cough in phthisis, as already mentioned.
4. In many cases of diarrhœa.
5. In dysentery and dysenteric affections. I find it useful in that peculiar dysenteric affection of delicate young women where shreds of lymph are passed with the fæces, and where there is often a good deal of abdominal pain and tenderness. It is also of value in the dysenteric diarrhœa of phthisis, where scanty mucous stools are passed, usually a troublesome complication.

I was lately told by a dentist that he occasionally gave it to counteract the tendency to retching caused in some patients by taking a cast of the mouth, and other dental manipulations.

I generally prescribe carbolic acid in one to two grain doses, with a little glycerine to aid its solution (though this is not usually necessary), and some tincture of cardamoms, or peppermint water, to cover its taste and smell.

I am, Sir, your obedient servant,

July 9th, 1878. ANDREW DUNLOP, M.D.

TREATMENT OF ASPHYXIA NEONATORUM.

To the Editor of THE LANCET.

SIR,—As the treatment for the resuscitation of still-born infants is exciting so much attention at the present time, I beg to send you particulars of a case which recently came under my observation.

A woman was taken in labour of her thirteenth child at 6 o'clock P.M.; my attention was called to the case at 1.30 A.M. of the following day. Upon my arrival at the house I found the pains had considerably abated, and after waiting two hours they entirely ceased. The fœtus was very high up in the uterus, but I was able to satisfy myself that the head was presenting, but in what position I could not tell. I left with directions that I should be called again when the pains returned, which was at 9.30 A.M. of the same day. I found that the membranes had ruptured, though there had been but slight discharge of liquor amnii. I gave forty grains of ergot in the form of decoction, which had the effect of increasing uterine action without any advancement of the head. As I have often done before, I passed my hand into the vagina, and by inserting two fingers between the fœtal head and the os uteri I effected the discharge of at least two pints of liquor amnii, soon after which I was able to ascertain that the fœtus was presenting with the face to the pubes. The uterus began to act more forcibly upon the body of the child, and though the progress was very slow, yet it was expelled by the natural efforts. There was not the most remote sign of vitality. The face was very much swollen and livid, and the skin of the cheeks was slightly abraded from the severe pressure on the pubic bones. There was no pulsation in the funis, which was very flaccid. Before separating the child from the mother, I at once proceeded to adopt the method as suggested by Dr. Howard in THE LANCET of May 25th, page 750. After persevering with this plan for about fifteen minutes I was gratified to find an eminently successful result—the child crying most lustily.

The infant was twenty inches long, and the circumference of the head was fifteen inches. The principal lesson I imagine to be learnt from this case is that, even in a case of great difficulty, the natural efforts are sufficient for the expulsion of the child, though I think I should have been induced to use forceps had I had them with me, but I was more than three miles from home.

I remain, yours faithfully,

RICHARD WELLINGS.

Waterloo-in-Cosham, Hants, July 3rd, 1878.

Obituary.

WILLIAM WATSON, M.R.C.S., L.S.A.

THE medical faculty of the old town of Lancaster have recently sustained a severe loss in the death of one of its most skilful and energetic surgeons, Mr. Wm. Watson, who died on the 24th ultimo, at the age of forty years. He was the son of Mr. Dawson Watson, a well-known solicitor of Sedbergh, and brother to Mr. J. D. Watson, the eminent artist. Mr. Watson was educated at the Sedbergh Grammar School, and commenced his medical career by serving an apprenticeship with Mr. Burrow, of Settle. He afterwards entered as a student of medicine at University College and Hospital, whose professors and medical staff soon recognised in him an acute observer and very promising student, and this was thoroughly realised during his medical curriculum. He passed with credit the various examinations, and in April, 1861, became a member of the Royal College of Surgeons of England, and Licentiate of the Society of Apothecaries. In January of the following year he succeeded Mr. Clarkson in practice in Lancaster, where he soon became known as a kind and skilful practitioner of the healing art and science, and one in whose judgment his compeers always placed great reliance. He more particularly distinguished himself as an operating surgeon and in the practice of obstetrics, in which he acquired a deserved reputation. Amongst other appointments, he held those of honorary medical officer to the Lancaster Infirmary, and medical officer of health to the borough of Lancaster and to the Lunesdale Union. When returning from a medical

meeting on the 16th May last, he was suddenly seized with an attack of hæmoptysis, and finally sank on the 24th ult., having been engaged in the harassing duties of an extensive practice for sixteen years.

ALFRED COTTERILL, M.B. LOND.

IT is with sincere regret that we have to record the death on June 11th, suddenly, of henrt disease, of Mr. Alfred Cotterill, of Newcastle-under-Lyme, Staffordshire, at the early age of thirty-three years. Mr. Cotterill had been long connected with this district, for at the age of seventeen he became a pupil of his uncle, Mr. Robert Garner, of Stoke-on-Trent, and at the same time entered on his pupilage at the old North Staffordshire Infirmary. After remaining three years at that institution he went to King's College, London, where, besides numerous class prizes and certificates, he gained a junior scholarship in 1866, and that for second-year students in 1867. He gained the senior scholarship at King's in 1869, and in the same year he was elected Warneford prizeman. At King's College Hospital he filled, in addition to the usual clerkships and dresserships, the appointment of physician accoucheur's assistant in the summer of 1869, and was house-physician in the next winter session. Mr. Cotterill passed the usual examinations for his diploma at the Royal College of Surgeons in 1869, and became a member of that institution and also a licentiate to the Society of Apothecaries. In the following year he took his degree of Bachelor of Medicine at the London University, and in the same year (1870) he was elected house-surgeon to the new North Staffordshire Infirmary, which post he filled for over three years and a half. On leaving the North Staffordshire Infirmary he joined Mr. Acton, surgeon, of Newcastle, as a partner, which partnership was maintained until his death. As a proof of the high esteem in which Mr. Cotterill was held by the people of Newcastle, it may be mentioned that, although a comparative stranger, he was elected a member of their School Board. He was equally esteemed by his professional brethren, for he was elected chairman of the North Staffordshire Medico-Chirurgical Society. In Mr. Cotterill North Staffordshire loses one of its most promising members of the medical profession.

JOHN SPENCE, F.R.C.S.

WE regret to record the death of this well-known surgeon of Bedale, who, after an illness of about six weeks' duration, expired on June 16th, and was interred in Bedale churchyard on the 21st. The deceased was born in Bedale in 1805, and received his early education in the Manchester Grammar School. After studying medicine at London, Edinburgh, and Paris, he practised some time in Manchester, but finally settled in Bedale about twenty-five years ago. He possessed great skill in his profession, particularly in the treatment of diseases of the eyes, several of his experiments in that branch of surgery having obtained the highest commendation of the faculty. In 1861 the Royal College of Surgeons elected him a Fellow of their body. Unremitting in his attention to his patients, he obtained their warmest esteem and confidence; while his genial disposition and courteous bearing won for him the affection of a large circle of friends and acquaintances. He was a man of refined and cultivated tastes, especially in music, and for many years sang in the choir of Bedale church. Questions connected with agriculture and the hygiene of stock likewise engaged his interest, and on these and other subjects valuable contributions from his pen appeared from time to time in the local papers.

THE ROYAL COLLEGE OF SURGEONS.

AT an extraordinary meeting of the Council of the Royal College of Surgeons, held on Wednesday last, Mr. Marshall and Mr. Holden were unanimously re-elected members of the Court of Examiners.

At a quarterly meeting, held on Thursday, Mr. Simon was elected President of the College, vice Mr. John Birkett, whose term of office has expired. Mr. Holden was elected senior Vice-President, and Mr. Erichsen junior Vice-President. Mr. Jonathan Hutchinson was elected Hunterian Professor of Surgery and Pathology, *vice* Mr. Spencer Wells; Mr. Flower and Mr. Parker were re-elected Hunterian Professors of Comparative Anatomy and Physiology; and Mr. Benjamin Thompson Lowne was elected Arris and Gale Lecturer of Anatomy. Dr. Sieveking and Dr. Bristowe were re-elected examiners in Medicine. The Professorship of Dermatology, lately vacated by its founder, Mr. Erasmus Wilson, will be in abeyance pending the consideration of some proposals submitted by the Council to Mr. Wilson, to alter, modify, and remodel its scope and character. A petition, signed by about twenty Fellows, was received, asking the Council to permit a meeting of the Fellows, to discuss the desirability of their holding an annual meeting, as suggested by Mr. Quain, in his letter recently addressed to the Fellows. The consideration of this petition was deferred until the October meeting. Mr. Timothy Holmes gave notice of motion to abolish the extra preliminary examination for the Fellowship. Mr. Gay gave notice of motion that Dr. Spencer Cobbold be allowed to deliver a course of lectures on Helminthology.

PARLIAMENTARY PROCEEDINGS.

HOUSE OF LORDS.

Thursday, July 4th.

VIVISECTION.

Earl DE LA WARR moved for the names of hospitals or other places registered for experiments upon living animals under the 39 and 40 Vic., cap. 77; also for the number of such experiments from the 1st of January, 1877, to the 1st of January, 1878; and the reports of the inspectors appointed under the Act.

Earl BEAUCHAMP said the Vivisection Act was passed in 1876. Last year, on the motion of Mr. Mundella, certain returns relating to that Act were presented to the House of Commons, and might be consulted by noble lords in the library. He understood that another return of the same nature, but more in detail, had been moved for in the House of Commons this year. That return would contain all the information at the disposal of the Secretary of State; but with regard to the reports of the inspectors, there would be an objection to laying them on the table, because they were confidential documents. He would suggest that the noble earl had better wait until the return had been presented to the other House.

Lord TRURO was glad the noble earl had brought this subject forward. Their lordships were aware that not long ago a Royal Commission was appointed to inquire into the enormities committed under what was called vivisection. It seemed to him that the Commissioners might have been more happily chosen than they were, considering the humanitarian nature of the object in view. Among them he found, for instance, an ardent sportsman and two or three official members, who were naturally, perhaps, more liable to be governed by motives of expediency than of humanity. He was aware, however, that that was not the best moment for discussing that question, so he would merely add that if the mind of the public was to be reassured on the subject of the horrors of vivisection it was surely essential that the places licensed, the names of the licensees, and also the names of the inspectors, should be publicly known.

Lord FORBES congratulated Ireland on having no licensed place for the practice of vivisection, and wished he could say as much for England and Scotland. He did not see why such places should be multiplied. One in London would, he believed, serve all really scientific purposes.

Earl DE LA WARR saw no reason why any matters in connexion with the Act should be kept secret, but after the remarks of the noble earl (Earl Beauchamp) he would withdraw his motion.

HOUSE OF COMMONS.

Thursday, July 4th.

THE MEDICAL BILLS.

In answer to Mr. Errington, Lord G. HAMILTON said,—The whole question of medical education and reform has been thoroughly discussed by the many and varied deputations visiting the Lord President and myself, and in our opinion, although there is a certain discrepancy of opinion among the various interested bodies upon minor details, the main question presents no difficulties that may not be satis-

factorily settled when discussed. I may add that the objects of all the Bills now before Parliament on the subject are the same, and can be covered by the Government Bill. The only question not yet ripe for legislation is that of a reconstruction of the Medical Council with a view to the direct representation of the general body of practitioners. This matter does require further consideration, but need not in any way prevent the passing of the Government Bill this session. We must, therefore, decline to entertain the proposal of referring our proposals to a select committee, for we feel sure that if time will permit of their discussion we may reckon upon the assistance of the House in helping us in carrying reforms so earnestly desired by the great majority of the medical profession.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the Primary Examination in Anatomy and Physiology at meetings of the Board of Examiners on Tuesday and Wednesday last:—

P. W. Langley, Belfast; W. Rowlands and Wm. Wilson, Edinburgh; E. G. Williams, Guy's Hospital; F. B. M. Wöhruitz, University College; R. J. Owen, London Hospital; R. Prothero, Liverpool; H. Wilson, J. Scarth, J. Harrison, R. W. Pickering, C. F. Power, and E. Berry, Manchester; E. F. Potter, Leeds; F. P. Nicholls, Cambridge; H. Wakefield and A. B. Coffin, St. Bartholomew's Hospital; J. Garez, Glasgow; P. M. Da Silva, Bombay; H. Gibbes, Aberdeen; R. W. Doyne, Bristol; R. Mitchell, St. Thomas's Hospital; S. G. Watson, Cork; F. N. Searancke, Liverpool.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on July 4th:—

Higgs, Alfred, Belgrave, Leicester.
Walker, Horatio Edward, Trinity-square.

The following gentlemen also passed the Primary Professional Examination:—

Ernest Edward Bray and Ernest Edwin Jewers, Middlesex Hospital; Freeth Foster Hodgson and Charles Frederick Rudd, St. Bartholomew's Hospital; Harold Lewis Palmer, London Hospital; Edward James Biden and George Braithwaite Wall, Charing-cross Hospital.

UNIVERSITY OF DUBLIN.—At a meeting of the Senate, held on the 4th inst., the following degrees were conferred:—

BACHELOR IN SURGERY.—Edward James Cowen, Henry Lawrence Cox, Francis Augustus Bonner Daly, James Dunne Day, James Campbell Hall, Arthur W. P. Inman, William Cox Neville, Guy Percival L'Estrange Nugent, John Gregg O'Neill, William Cleland Wilkinson, Richard Blayney Wrightson.

BACHELOR IN MEDICINE.—Fredk. Charles Berry, Ludovic Buchanan, Cecil Josiah Bushe, James Campbell, Walter Peter Carson, Francis Augustus Daly, Yelverton Dawson, Henry Singer Gabbett, Joseph Gibson, James Campbell Hall, Richard Atkinson Hayes, Reynolds P. Hetherington, Arthur W. P. Inman, James Bostok Jacob, Robert Henry Johnston, Christopher John Nixon, Guy Percival L'Estrange Nugent, John Gregg O'Neill, Walter Poole, Frederick Ogilby Ross, William Cleland Wilkinson.

MASTER IN SURGERY.—Robert Norman Thompson, William Fetherstonhaugh Lambert.

DOCTOR IN MEDICINE.—William Chatterton, William Clibborn, Arthur Henry Cole Dane, Yelverton Dawson, Herbert John Fausset, William Frazer, Henry Alex. Gogarty, Richard Atkinson Hayes, William Walter.

MASTER IN OBSTETRIC ARTS.—William Cox Neville.

LICENTIATE IN MEDICINE.—James Grove Crofts, Crosdaile Miller Thompson.

LICENTIATE IN SURGERY.—James Grove Crofts, Crosdaile Miller Thompson.

MR. T. R. PICKTHORN has been promoted to the rank of Inspector-General of Hospitals and Fleets.

THE Council of the Hospital Saturday Fund have received, through Mr. John Melhuish, of St. Swithin's-lane, the sum of £30, being a bequest left by the late Mr. Westropp to the above-named gentleman, to be devoted to the benefit of London hospitals at his discretion.

COOMBE LYING-IN HOSPITAL, DUBLIN.—The annual report of this institution for the year ending April 1st shows that during that period 596 ordinary cases and 74 of a serious character were under treatment in the hospital, 1591 cases were attended at their own homes, and the cases of diseases of women and children attended at their own homes from the dispensary connected with the hospital numbered 4120, while those prescribed for and supplied with medicine at the dispensary were 12,952. Including a grant from Government of £200, and £520 from the Corporation of Dublin, the income for the year amounted to £1500, a sum altogether disproportionate to the necessary expenditure; the result being that the accounts show the charity indebted to their bankers several hundred pounds. This institution is now in the fiftieth year of its existence, and, placed in the centre of a very populous and extremely poor neighbourhood, the relief it has afforded is incalculable. An improved system of nursing and a more liberal dietary for the inmates have recently been adopted with great advantage, increasing the comfort of the patients, rendering them more healthy, and enabling them to return to their homes stronger and more capable of resuming their household duties.

SMALL-POX IN DUBLIN.—Last week the fresh cases of small-pox admitted into Cork-street Fever Hospital, the principal hospital for receiving patients for this disease, amounted to 60, a considerable increase over that of previous weeks. It appears that some of those admitted had been suffering ten or twelve days before coming into the hospital, and one case had exhibited the confluent form ten days before admission. The Public Health Committee of the Corporation of Dublin have requested the Local Government Board to consider the advisability of putting into execution the power vested in it for the prevention of the spread of epidemic diseases.

Medical Appointments.

ALLARD, W., F.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Tewkesbury Urban Sanitary District, at £50 per annum.

BAYNES, Mr. J., jun., has been appointed Public Analyst for the East Riding of Yorkshire, for one year. £2 12s. 6d. for each quarterly report, 15s. per analysis and certificate for the first hundred, 10s. 6d. per analysis and certificate for the second hundred, and 6s. per analysis and certificate beyond, and 21s. per day and 3d. per mile each way, for travelling expenses, when required to give evidence.

BENTON, S., L.R.C.P.L., M.R.C.S.E., & L.M., has been appointed Surgeon to the Farringdon General Dispensary and Lying-in Charity, Bartlett's-buildings.

BLYTH, A. W., M.R.C.S.E., L.S.A.L., has been appointed Public Analyst for the Borough of Bideford, Devonshire.

DIXEY, H. E., M.B., C.M., has been appointed Junior House-Surgeon to the Royal Infirmary, Preston, vice Langdon, promoted.

DODD, T. A., L.R.C.P.Ed. & L.M., M.R.C.S.E., has been appointed an Assistant-Surgeon to the Newcastle-upon-Tyne Infirmary, vice Hume, appointed a Surgeon.

DONKIN, W. F., M.A., F.C.S., has been appointed Public Analyst for Wiltshire for one year.

FIELD, A. F., M.D., L.R.C.P.Ed., has been appointed Medical Officer of Health for the Swaffham Rural Sanitary District, Norfolk, at £50 per annum, vice the District Poor-law Medical Officers.

GIBSON, G. A., M.B., C.M., D.Sc., has been appointed Assistant-Physician to the General Hospital, Birmingham, with an honorarium of £100 per annum for three years.

GOODWORTH, R. P., L.R.C.P.Ed., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health to the Urban Sanitary Authority of Winterton, Brigg, at the annual salary of £15 15s., for three years.

HODGES, W., M.R.C.S.E., L.S.A.L., has been appointed Medical Visitor of Fairford House Lunatic Asylum, Gloucestershire.

HUNT, J. W., M.D., has been appointed an Honorary Physician to the Wolverhampton and Staffordshire General Hospital.

JACKSON, G. H., L.R.C.P.Ed., M.R.C.S.E., has been appointed Assistant Medical Officer to the Workhouse Infirmary, New Bridge-street, Manchester, at £140 per annum, furnished apartments, &c., vice Diggle, resigned.

LANGDON, J. W., M.R.C.S.E., L.S.A.L., has been appointed Senior House-Surgeon to the Royal Infirmary, Preston, vice Hallsworth, resigned.

LE TALL, F. T., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Handsworth Urban Sanitary District, Yorkshire, at £20 per annum.

LLOYD, J. D., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 4 District of the Oswestry Incorporation of the Poor, vice Box, resigned.

MCMASTER, A., L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, &c., for the Ballygawley Dispensary District of the Clogher Union, co. Tyrone, at £100 per annum and registration and vaccination fees, and £15 per annum as Medical Officer of Health, vice Phillips, resigned.

MANVILLE, B. E., M.R.C.S.E., has been appointed Surgeon-Dentist to the Metropolitan Free Hospital.

PURNELL, T., M.D., L.R.C.P.Ed., has been reappointed Medical Officer of Health for the Glastonbury Urban Sanitary District, at £20 per annum.

RAWSON, E. E., L.R.C.P.Ed., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Clayton Urban Sanitary District, Yorkshire, at £18 per annum for three years.

SMITH, Dr. A. T., has been appointed Medical Officer to the Annandale, Thornton, and Springhill Collieries, near Kilmarnock, vice McLeod, resigned.

THOMAS, J. W., F.C.S., has been appointed Public Analyst for the County of Monmouth, at £10 10s. per annum (to include the making of statutory quarterly reports), 10s. 6d. for each analysis of food &c., and not exceeding 21s. for each analysis of water.

TWEEDY, J., F.R.C.S., has been appointed Assistant-Surgeon to the Royal London Ophthalmic Hospital, Moorfields.

WALKER, W. A., M.B., C.M., M.R.C.S.E., has been appointed Certifying Factory Surgeon for Chesterfield, vice H. E. Walker, M.D., deceased.

WELLER, J., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the No. 7 or Middlezoy District of the Bridgwater Union, and Public Vaccinator for the No. 8 or Middlezoy Vaccination District, and the No. 2 or Chedzoy Vaccination District, vice Burroughs, resigned.

WHITCOMBE, E. B., M.R.C.S.E., L.S.A.L., has been appointed Medical Superintendent of the East Riding Lunatic Asylum, Beverley, at £350 per annum, furnished house, &c., vice Greene, appointed Medical Superintendent of the Northamptonshire Lunatic Asylum, Berry Wood.

WOOD, W. E. R., M.B., L.R.C.P.Ed., has been appointed Assistant Medical Officer to the Royal Hospital of Bethlehem, at £300 per annum, residence, &c., vice Savage, appointed Resident Physician and Medical Superintendent.

Births, Marriages, and Deaths.

BIRTHS.

BARRIE.—On the 28th ult., at Royal-crescent, Crosshill, Glasgow, the wife of John Barrie, M.D., of a son.

BROWNE.—On the 30th ult., at Lynton House, Albion-road, Stoke Newington, the wife of Henry Browne, L.R.C.P., L.S.A.L., L.M., of a daughter.

EADIE.—On the 2nd inst., at Woodside-place, Glasgow, the wife of William Eadie, M.D., of a son.

GAYTON.—On the 8th inst., at the Homerton Small-pox Hospital, the wife of W. Gayton, M.D., M.R.C.P.Ed., Medical Superintendent, of a daughter.

LAWSON.—On the 8th inst., at St. Mary's, Barry-road, Peckham-rye, the wife of R. Lockhart Lawson, M.R.C.S.E., L.S.A.L., & L.M.D., of a son.

MUMFORD.—On the 8th inst., at Bartlett's-passage, Holborn-circus, the wife of William Lugar Mumford, M.D., of a son.

THOMPSON.—On the 6th inst., at Stapleton, Bristol, the wife of George Thompson, L.R.C.P.L., of a daughter.

TURNBULL.—On the 28th ult., at Kelso, the wife of George H. Turnbull, M.D., of a daughter.

MARRIAGES.

GREENFIELD—FOSTER.—On the 4th inst., at Bristol, W. S. Greenfield, M.D., to Charlotte, youngest daughter of Joseph Foster, Esq.

SIMMS—BROADHEAD.—On the 4th inst., at the Parish Church, Pontefract, Henry Jordan Simms, L.R.C.P.Ed., to Mary Anne, daughter of Joseph Broadhead, Esq.

DEATHS.

BOWEN.—On the 17th ult., at Richmond-road, Hammersmith, Charles Chappell Bowen, Surgeon, aged 86.

CALDER.—On the 30th ult., at Victoria-road, Aldershot, William Menzies Calder, Surgeon-Major, Army, aged 48.

FRASER.—On the 7th inst., at Hampstead, Donald Fraser, M.D., aged 67.

FRASER.—On the 2nd inst., at Merlewood, Inverness, J. G. Fraser, M.D., late of the Bombay Medical Service.

HARRIS.—On the 4th inst., at Kempston, Bedford, Henry Harris, L.R.C.P.Ed., aged 45.

MURPHY.—On the 19th ult., at Bagenalstown, co. Carlow, Joseph William Carter Neynoe Murphy, L.R.C.P.L., Assistant-Surgeon, Army (on half-pay), aged 40.

SHIPTON.—On the 2nd inst., at Warwick, John Noble Shipton, M.R.C.S.E., Surgeon-Major, Army, aged 46.

STUBBS.—On the 1st inst., at Canning-street, Liverpool, Henry Stubbs, F.R.C.S.E., aged 69.

WILKINS.—On the 9th inst., at Brixton-road, Alice Louise, infant daughter of J. C. Wilkins, M.R.C.S., aged 11 days.

WINKFIELD.—On the 30th ult., at Shirley, Southampton, William Benjamin Winkfield, L.R.C.P.Ed., aged 43.

[N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages and Deaths.]

BOOKS ETC. RECEIVED.

J. Morton: A Novel View of the Causes producing Typhoid Fever &c.
D. H. J. Bigelow on Litholapaxy.
Davos-Platz. By One who knows it well.
S. Hill: Fragmentary Philanthropic Appeals.
Dr. A. Harvey and Dr. A. D. Davidson: Syllabus of Materia Medica.
R. Metcalfe: The Water-cure.
"The Intermedical Note." By Practitioner.
J. E. Petrequin: Chirurgie D'Hippocrate. Vols. I. & II.
Dr. G. Hewitt: The Mechanical System of Uterine Pathology.
W. W. Watson: Report upon the Vital, Social, and Economic Statistics of Glasgow for 1877.
The Medical Temperance Journal. July.
The Pantiles Papers.
The Dietetic Reformer. July.
The Practitioner. July
The Westminster Review. July.

PASS AND PLUCK.

REPORT from the Court and the Board of Examiners of the Royal College of Surgeons of England of the number of candidates who presented themselves for the Primary and Pass Examinations for the diploma of Member of the College during the collegiate year 1877-78, showing the number who have passed and have been rejected from each medical school during that period.

PRIMARY EXAMINATIONS.

Medical Schools.	1877-78. Totals.	Number passed.	Number rejected.
St. Bartholomew's	97·83	69	28·83
Guy's	90·50	63·50	27
University College	84·6	54·3	30·3
St. Thomas's	49	33·50	15·50
St. George's	44	34	10
King's College	36	14	22
St. Mary's	35·50	27·50	8
London	33·50	16·50	17
Middlesex	30·7	22	8·7
Charing-cross	23·50	16·50	7
Westminster	14	6·50	7·50
Manchester	37	22·50	14·50
Liverpool	21·3	12·50	8·83
Birmingham	18·83	12·3	6·50
Cambridge	17·50	12	5·50
Bristol	16	9	7
Leeds	15	7·50	7·50
Newcastle-on-Tyne	12	8	4
Sheffield	6	2	4
Dublin	6	4	2
Belfast	1	1	....
Cork	·50	·50	....
Edinburgh	33	20	13
Aberdeen	4·50	3·50	1
Glasgow	4·3	2·3	2
New York	1·7	1·50	·2
Toronto	2	1	1
Philadelphia	1	....	1
Kingston, Canada	·50	·50	....
Calcutta	2	·50	1·50
Madras	·50	·50	....
Melbourne	2	1	1
Berlin	2	....	·2
Vienna	·2	....	·2
Heidelberg	1	1	....
Paris	·2	....	·2
Harvard University	·50	....	·50
Totals	744	477	267

PASS EXAMINATIONS.

Medical Schools.	1877-78. Totals.	Number passed.	Number rejected.
Guy's	78·83	63·3	13·50
St. Bartholomew's	78·50	65·50	13
University College	66·50	50	16·50
King's College	43·50	32	11·50
St. Thomas's	39·6	28·83	10·83
London	27·6	25·6	2
St. George's	22·50	14·50	8
St. Mary's	19	11·50	7·50
Middlesex	16·83	13·83	3
Charing-cross	6·83	6·3	·50
Westminster	6·50	6·50	....
Manchester	21·83	14·83	7
Liverpool	15·3	11·3	4
Leeds	10·83	6·83	4
Newcastle-on-Tyne	9	5	4
Birmingham	7	7	....
Bristol	5·50	5	·50
Cambridge	5·50	5	·50
Sheffield	4	4	....
Dublin	7	4·50	2·50
Belfast	3·3	3·3	....
Galway	·50	·50	....
Edinburgh	15·16	10·83	4·3
Aberdeen	4·50	3	1·50
Glasgow	2·50	1	1·50
Bombay	·50	·50	....
Calcutta	·50	....	·50
Madras	·50	·50	....
Toronto	3	2	1
Melbourne	1·50	1·50	....
New York	1	1	....
Montreal	·50	·50	....
Kingston, Canada	·50	·50	....
M'Gill	·3	....	·3
Laval	·3	·3	....
Berlin	1	1	....
Würzburg	·50	·50	....
Heidelberg	·50	·50	....
Totals	529	409	120

Note.—In these respective lists candidates who are indicated by a fraction have received their education at more than one school of medicine.

Notes, Short Comments, and Answers to Correspondents.

THE CHINCHONA FEBRIFUGE.

THE following extract of a letter from Dr. King, Superintendent of the Botanical Gardens of Calcutta, to Mr. Clements Markham, on the subject of the preparation now under trial in India, will prove interesting to a large number of our professional brethren in the public services:—

"You will be glad to hear that the prejudices which at one time were rather strong in some quarters against the febrifuge are being rapidly overcome, and that by the Bengal doctors it is being cordially accepted as a substitute for quinine. During the financial year which ended on March 31st, 1878, I disposed of 5107 pounds of it in Bengal, and of 400 pounds of it in Bombay, and in view of our increased demand this year I have taken a crop of 320,000 pounds of dry bark from the plantation during the past cold weather. There is no doubt that in the same doses as quinine the febrifuge is quite as efficient as quinine in the cure of fever. In a short time I hope the febrifuge will be sold for 1s. 6d. an ounce. At present it is sold to the public at 23 rupees per pound." To supply an efficient substitute for quinine at 1s. 6d. an ounce would indeed prove a boon to the world generally, and especially to those portions of it where malarious fevers are prevalent. We fear, however, that Dr. King takes a somewhat too sanguine view of the adaptability of the febrifuge. It is within our knowledge that many Indian surgeons, after giving it a fair and extended trial, have been compelled to report unfavourably of the proposal to *substitute* it for quinine, while at the same time it is acknowledged to be a very serviceable preparation. Two not unimportant objections that have been urged against it are its insolubility, and its tendency to produce intestinal irritation and nausea.

Mr. E. Albert Courtenay.—Certainly not. It would mislead.

A NEW FORM OF SPINAL JACKET.

To the Editor of THE LANCET.

SIR,—In a letter published in THE LANCET of June 1st on the subject of Sayre's treatment of spinal curvature, I expressed a hope that we might soon be in possession of a more convenient material than the plaster-of-Paris for moulding retentive spinal appliances. Since writing that letter I have been supplied by Mr. Ernst, of Charlotte-street, with "jackets" manufactured of Cocking's patent poro-plastic, a description of felt which is well known to the profession. These jackets are made in the shape of the trunk, and are somewhat similar to a corset, being open in front, and fastened with a lace. They are accurately fitted to the patient in the following manner:—The jacket is made pliant by placing it in a chamber of air heated to a temperature of 180° F.; in five minutes the felt is thus rendered perfectly soft and flexible. The patient having been suspended, provided with a vest &c., according to Sayre's method, and wrapped round with wet cloths, the jacket in its heated and softened condition is at once applied, moulded with the hand where necessary, and fixed by a bandage rolled from below upwards. In about three minutes the felt becomes cold and "set," the bandage is removed, and the jacket at the same time laced from above downwards. In this simple and rapid manner a most excellent retentive splint is formed. If there is any failure in the first application, the jacket can be again heated and reapplied, the material being capable of reheating without detriment for a great number of times. Undue pressure at any spot, which is not sufficient to necessitate remoulding of the whole splint, may be remedied by laying a sponge soaked in hot water on the felt, which is thus softened, can be bent to the necessary shape, and again hardened by cold water. I have used these jackets in several cases, and find them to possess many advantages over the plaster-of-Paris. The quickness and ease with which they can be applied contrast strongly with the mess and trouble attending the use of the plaster, and on this account alone they are a great boon to both patient and surgeon. Being removable, they are capable of application in the treatment of rotato-lateral curvature, especially in those advanced cases of deformity which are beyond the hope of cure, and in which relief only can be obtained by use of a supporting instrument.

I remain, Sir, yours &c.,
FRED. R. FISHER, F.R.C.S.,
July, 1878. Surgeon to the National Orthopædic Hospital.

Castor.—The new Medical Bill will be rather favourable than otherwise. It certainly will not prevent a properly qualified and registered medical man from using the title of "Dr." on the strength of the M.D. of Brussels. It contemplates the registration of foreign degrees under certain circumstances, subject to the approval of the Council.

Doubtful.—It is better to call things by their right names.

THE PROSPECTS OF THE PROFESSION.

To the Editor of THE LANCET.

SIR,—Since the issue of your last number I have heard nothing but regrets at the remark made by Sir William Gull, that "there was no more infamy in a woman sounding a man than a man sounding a woman." (Walker's Dictionary gives *disgrace* as the meaning of infamy.) There are very few who would agree with Sir William Gull in thinking there was no more disgrace in a woman sounding a man than a man sounding a woman. Fie, Sir William! Yours obediently
July, 1878. M.D

PROFESSOR VIRCHOW.

THE distinguished physiologist, and a leading member of the Fortschritt party, Professor Virchow, has decided on leaving active political life, and has addressed the following words to his late constituents:—"There are people who say I do not wish to go back to the Reichstag out of pure dislike to the Empire. Certainly I am one of those who combated the present Imperial laws at their creation, as being inadequate and injurious. But now that they exist, I resign myself to the hard reality, and stand as firmly as any one by the Emperor and the Empire. I cannot accept a seat in the Reichstag, simply because it would be incompatible with my scientific labours to do so, and would inevitably lead to my abandoning them altogether. Perhaps you may think me a good-enough politician, but for myself I think I am a better *savant*. I am convinced that in this my real province I can be more useful than in the Reichstag."

L.R.C.S.E.—1. Paris, Montpellier, Nancy (replacing Strasburg), Lyons (recently established).—2. In Paris there is a winter session, beginning in November and ending at Easter; the summer session begins after Easter, and goes on till August.

A Candidate.—The announcements are made in due course.

ANIMAL VACCINATION.

DR. ALEX. M'COOK WEIR sends us the following note, which he has received from M. Warlomont, of Brussels, on the subject of the possibility of inoculating syphilis in the operation of animal vaccination:—

"Brussels, 7th July, 1878.—This is my answer in reply to yours of yesterday. 1. If one inoculate syphilis to a calf, the latter does not take it; the virus dies on the spot. 2. If one inoculate syphilitic vaccine to a calf, the syphilis remains outside, and only vaccine develops itself. The latter is certainly free from any trace of syphilis. 3. Heifer vaccine, whatever be its source, can never, therefore, give syphilis, in virtue of the saying:

'La plus jolie fille du monde,
Ne peut donner que ce qu'elle a.'

That does not mean that vaccination *in its performance* cannot transmit syphilis when the calf is the agent. When one vaccinates at the same time several children, the lancet may, if that instrument be used, bring to the pustule some contaminated blood, which will then be transmitted to another. To avoid this, care only is wanted."

To this Dr. Weir adds:—

"Dr. Martin does not use a 'lance' at all, but only a lancet-shaped point, which carries the vaccine, thereby avoiding the danger which M. Warlomont points out. Both, however, agree that vaccination direct from the calf is free from 'syphilitic contamination,' the latter after twelve, and the former after seven years' experience in this practice."

*** In the editorial note to Dr. Alex. M'Cook Weir's letter on Animal Vaccination, printed in our last number (p. 29), a misprint occurs. The word *not* was accidentally dropped out of the italicised sentence. This should have read, "which the latter are *not* peculiarly desirous to have reported." The context would make the misprint obvious.—ED. L.

THE LATE QUEEN OF SPAIN.

To the Editor of THE LANCET.

SIR,—More than a century and a half having elapsed since Huxham wrote so ably on typhoid and typhus fevers, drawing as he did the differential diagnosis between the two distinct affections, is it not strange that there should, with all our boasted progress, be at this day a Royal personage, Queen Mercédès, presumed to have the best advice attainable, attended by physicians so profoundly ignorant of the disease under which she laboured that they seem not to have been able to give the malady its distinctive and accepted name? If we know the name of a man or thing, it may be presumed that we also know something more about him or it; but, ignorant of the names, the fair presumption would be that we know nothing whatever about either. The first bulletin told a sympathising world that Mercédès had gastric fever, which her medical attendants feared might run into typhoid. As well might it be apprehended that gout or any other real or supposed malady would run into small-pox. It was next stated that she had hæmorrhage from the bowels—not an uncommon occurrence in typhoid fever; then that she had partially recovered from the effects of loss of blood, and that a favourable progress to convalescence was hoped for; lastly, there came an official bulletin, stating that "the cause of death was nervous gastric fever, accompanied by an abundant hæmorrhage of the intestines." I should be glad to know what is meant by "nervous gastric fever." No such disease is treated of by the systematic writers, and I am not aware of any monograph treating of an affection under that name. Or would the Madrid doctors have us to understand that they have discovered a new malady, of which their Queen was the first victim?

Yours respectfully,
July, 1878. INQUIRER.

P.S.—Does not the exhibit furnished by these bulletins show clearly that the schools ought in future to have regard to the quality rather than the quantity of men or women they turn out with warrants of their ability to recognise and treat disease?

*** The case is by no means satisfactory from a medical point of view, and, in the absence of precise information, the profession will form its own opinion as to the actual cause of death.—ED. L.

Mr. Lynch.—The Royal College of Physicians selects the gentlemen who are to be honoured with invitations to its gatherings on a principle we do not profess to understand.

ST. BARTHOLOMEW'S AND THE PARISH OF CHRISTCHURCH, NEWGATE.

ANTIQUARIANS must have been gratified by the disclosure in the recent case of St. Bartholomew's *v.* Phillips, before the Master of the Rolls, of the old claims of the Governors of Bartholomew's on the parishioners of Christchurch for a payment of tithes at the rate of 2*s.* 9*d.* in the pound on the yearly rents—a rate fixed so long ago as the reign of Henry the Eighth. The defendants showed that for 200 years the commuted sum of £300 had been paid by the whole parish, that the same had been accepted by the hospital, and that the defendants were not liable for more. In 1872 the hospital boldly revived the old claim. Hence this legal dispute. It was wisely ended by an amicable compromise, approved by the Master of the Rolls, by which the defendants agree to withdraw their opposition to a Bill now before Parliament, which will require the parish to pay £1200 a year from the year 1877 till 1887, when the sum thereafter to be paid annually shall be £2400.

Mrs. Homan.—Write to some good shipowners, the names of whom can be found by consulting the advertising columns of the *Shipping Gazette* or *The Times* devoted to the Australian passenger trade. Age is no special hindrance in obtaining an appointment; but advertising agents are to be avoided. Private interest is, of course, useful.

Celsus.—If we remember rightly, the year was 1859. The College gave their licence to apothecaries without examination.

Dr. J. Swain Scriven is thanked.

HYOSCYAMINE IN HYDROPHOBIA.

To the Editor of THE LANCET.

SIR,—It is with some diffidence, owing to my never having seen a case, that I venture to ask you to allow me to make THE LANCET the medium for suggesting hyoscyamine as a remedy which is likely to prove beneficial in the treatment of hydrophobia.

The case which was reported by Dr. Nicholls seems to give some hope that this affection is not incurable, and consequently that the use of any remedy likely to afford relief ought not to be neglected.

In hyoscyamine we have a drug which has been proved to exert a great influence on many affections produced by a disordered state of the nervous system.

In the January number of the *Practitioner*, 1873, there is a translation of an article by Dr. Oulmont, noticing its action in various affections, and more particularly in a case of tetanus, where it afforded great relief, although used in small doses (one-sixth of a grain), the author concluding that larger doses might have been employed. In No. 5 of his conclusions he says: "It exerts a favourable action in spasmodic and convulsive neuroses."

In July, 1876, Dr. Robert Lawson had an article in the *Practitioner*, describing its effects in cases of mania and other affections by means of large doses (one grain). Having at the time a case of mental derangement, accompanied by fits of violent mania, I determined to give hyoscyamine a trial, and one draught proved so efficacious that the patient was very quiet for some months. It was given in the form recommended in the *Practitioner*: Hyoscyamine, one grain; spirit of ether, eight minims; alcohol, twenty-four minims; spring water to one ounce. Some time afterwards, having a case of hysterical convulsions in a young girl, which increased in violence to such an extent as to make it almost impossible for any number of people to be able to manage her, notwithstanding the administration of the largest dose of chloral &c. which I dare use, I gave her a similar draught, and with such good results that she has never had another fit since.

For further particulars as to the action of hyoscyamine, I beg to refer your readers to the articles mentioned, and to the West Riding Asylum Reports for 1876.

Yours faithfully,

THOMAS PERCIVAL.

Knottingley, July 8th, 1878.

ANOTHER SHILLING A WEEK VENTURE IN THE NAME OF PROVIDENCE.

WE have been favoured with a circular concerning the great advantages of a Dispensary to artisans, mechanics, servants, and other persons of small means. Payment is during sickness only, and is at the modest rate of one shilling a week for attendance at the dispensary, and half-a-crown a week for attendance at home. It is admitted that the charges will barely (very barely we should say) cover the cost of drugs. We fail to see the justification of a system which, more than free dispensaries, degrades medicine.

Mr. Pigott.—It is desirable to give precise instructions for nursing special cases.

TREATMENT OF ACNE ROSACEA.

To the Editor of THE LANCET.

SIR,—In your issue of June 8th, "Young Surgeon" asks for a line of treatment in acne rosacea. He will find good effect from the use of the bisulphite of soda in doses of from fifteen to twenty grains three times a day, or from the hyposulphite of soda in larger doses. These may be prefaced by a few doses of calomel and jalap. When the acne begins to disappear, nux vomica may be given three times a day before food.

Very respectfully,

GEO. HENDRY, M.D.

Zilwankie, Michigan, U.S.A., June 20th, 1878.

Mr. J. W. Adams.—Painting in "distemper" is a process quite familiar to house-painters, and our correspondent should have no difficulty in obtaining information as to the method by which it is pursued.

BURIAL-GROUNDS IN LIVERPOOL.

THE Liverpool Health Committee a short time back became anxious respecting the condition of the burial-grounds in the borough, and directed their medical officer and engineer to report on the same. On the presentation of these reports the Committee passed resolutions in favour of applying to the Home Secretary for two orders—one for prohibiting any further burials in the burial-grounds, cemeteries, churches, and chapels within the borough in which fresh graves or vaults are not now permitted to be made, but in which burials can take place in existing vaults or graves; and the other for prohibiting the making of fresh graves and vaults in the borough, and also for providing that the use of any existing vault or grave be subject to such restrictions as may be requisite for the conservation of the public health. It is twenty years since any action was taken in Liverpool in this particular direction, and it seems now to be generally felt in the town that to permit further interments in certain burying-grounds might prove dangerous to the inhabitants.

M.D.—All, or nearly all, civil surgeoncies in India are held by army medical officers, and the best appointments are given to those who take the highest position in the army competitive examinations; so that practically the best road to good civil surgeoncies is through the Indian Army Medical Department, the vacancies in and examinations for which are advertised from time to time.

Subscriber.—The L.R.C.P. Ed. does not convey any right to assume the title of "doctor."

Dr. Burgess.—We are obliged for the communication, but do not see how to interfere in the matter.

CARBOLIC ACID IN WHOOPING-COUGH.

To the Editor of THE LANCET.

SIR,—To those who are anxious to know more about the value of carbolic acid in whooping-cough, the following may be of some use.

Two years ago I had a number of very obstinate cases, which defied every remedy, excepting carbolic acid, under the use of which the malady rapidly subsided. Since then I have used the drug in a large number of cases, and invrriably with a satisfactory result. The remedy should not only be administered internally, but also deposited about the house as a disinfectant, in order to modify the disease in those in whom as yet it may only be undergoing its latent period.

The use of carbolic acid in whooping-cough was made known to me by Dr. Gilbertson, of this town, who has used it with the best of results for many years. About six years ago he cured several members of his own family by means of the acid.—Yours truly,

T. D. HARRIES, F.R.C.S. Eng.

Aberystwith, July 7th, 1878.

430.—The "paper printed on blue paper" to which our correspondent refers is, we presume, the schedule of which a copy is sent to each candidate for the A.M.D., with the Declaration which he signs before he is placed on the list of candidates. In that declaration the candidate engages "for general service, under the conditions detailed in the schedule of qualifications," and the fact that the schedule "contains no signature" does not in the least affect it as an official document. The schedule states that "the rates of pay, including allowances, while serving in India will range from 317 rupees (£31 14*s.*) to 433 rupees (£43 6*s.*) per month, according to length of service." Our correspondent has received the 317 rupees promised him; but, owing to the depreciation in the value of the rupee, the sum has not amounted to £31 14*s.* This is unfortunate for him; but it is an old grievance in India, and one which applies to the whole army, and not to medical officers alone. We would recommend the authorities in future, unless they are prepared to make good the difference, not to put in brackets the estimated value of the Indian pay, but to state it in rupees, and allow candidates to ascertain their market value for themselves.

Bexley Heath.—The use of such a title by an apothecary has not the sanction of law.

VIOLET POWDER.

To the Editor of THE LANCET.

SIR,—It would be extremely satisfactory to myself and others who have to carry out the Acts against adulteration of food and drugs to know the opinion of yourself and the profession as to whether or not the admixture of sulphate of lime with starch, to the extent of over one-half of the former, in the manufacture of violet powder is justifiable in any sense, and whether you or they consider such admixture injurious to those who are likely to use violet powder.

Yours obediently,

ANXIOUS.

July 8th, 1878.

*** Beyond question the admixture is unwarrantable.—ED. L.

SNUFF ADULTERATION.

THE Board of Inland Revenue has just issued an order, calling attention to the new law regulating the nature and quantity of salts which may be added to tobacco in the manufacture of snuff. With a view of preventing the use of chromates and the poisonous salts, it is provided that from the 1st October next no salts or alkaline salts, except the carbonates, chlorides, and sulphates of potassium or sodium, and the carbonate of ammonium, shall be employed in making snuff. The quantity of lime which may be added is limited to one per cent.

Dr. Macewen.—Better write to the journal in which the critique appeared.